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15

16   **UNITED STATES DISTRICT COURT**

17   **NORTHERN DISTRICT OF CALIFORNIA**

18   **OAKLAND DIVISION**

19 | Case No. 4:20-cv-05640-YGR-TSH

20   EPIC GAMES, INC.,

21   Plaintiff, Counter-defendant,   **EPIC GAMES, INC,'S FOUR-**
                                                       HOUR DEPOSITION
22   v.   **DESIGNATION**

23   APPLE INC.,   Judge: Hon. Yvonne Gonzalez Rogers

24   Defendant, Counterclaimant.

25

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28

1   Epic Games, Inc. respectfully submits the four-hour deposition designations

2 attached herein.

3

4

Dated: April 27, 2021   CRAVATH, SWAINE & MOORE LLP

5

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9
                                            Respectfully submitted,
10
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Epic Games., Inc.'s Four-Hour Deposition Designation

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<u>*Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640-YGR-TSH (N.D. Cal.)</u>

Deposition Designation of Adrian Ong
(February 24, 2021)

Time

Epic Games, Inc.'s Designations (Blue Highlight)	Apple Inc.'s Designations (Yellow Highlight)
1 hour 2 minutes 19 seconds	1 minute 17 seconds

Ong, Adrian (Vol. 01) - February 24, 2021   1 CLIP (RUNNING 01:03:32.737)

79 SEGMENTS (RUNNING 01:03:32.737)

1. PAGE 9:10 TO 9:12 (RUNNING 00:00:04.121)

```
10        Q.      Can you please state your full name for
11   the record?
12        A.      Yes.  Adrian Ong.
```

2. PAGE 9:15 TO 9:18 (RUNNING 00:00:05.141)

```
15        Q.      Are you currently employed?
16        A.      I am.
17        Q.      By whom?
18        A.      Match Group.
```

3. PAGE 9:22 TO 10:12 (RUNNING 00:00:49.908)

```
22        Q.      What position do you hold at Match
23   Group?
24        A.      I am the senior vice president of
25   operations for Match Group.
00010:01        Q.      What are your responsibilities as senior
02   vice president of operations at Match Group?
03        A.      So I provide oversight to our portfolio
04   brands on various operational areas, whether or not
05   it's payments, customer service, fraud or various
06   initiatives that they're working on.
07                I'm also in charge of negotiating a
08   lot of our partnerships across the brands.
09   Especially those which are common across multiple
10   brands or across some of our largest brands, and
11   that has included in the past, you know, our Apple
12   and Google relationship.
```

4. PAGE 12:09 TO 13:25 (RUNNING 00:02:36.396)

```
09        Q.      Just stepping back, what is Match Group?
10        A.      Match Group is a portfolio company that
11   owns, you know, most of the largest dating brands,
12   online dating brands.
13        Q.      What were some examples of Match Group's
14   current products?
15        A.      Tinder, Hinge, match.com, OkCupid.
16        Q.      Again, what types of products are those;
17   what do they do?
18        A.      They're introducing singles to each
19   other.  So, essentially, an online dating platform.
20        Q.      How can consumers access those products?
21        A.      They can access them through apps.  So
22   iOS app, Android app, and then through the web.  So
23   mobile web or the desktop.
24        Q.      Are any of Match Group's dating service
25   products available on gaming consoles, such as the
00013:01   Nintendo Switch, the Xbox or the PlayStation?
02        A.      Not that I'm aware of.
03        Q.      Okay.  Why is that?
04        A.      It's -- I just don't see it being a good
05   fit.  Number one, it's about audience.  You know,
06   I'm sure there's lots of singles who are gamers,
07   but -- you know, I would -- I wouldn't say every --
08   you know, there's a large -- I wouldn't say all
```

```
09  single folks are gamers.
10          And so -- and we just find that, you
11  know, majority of the audience and distribution is
12  on the mobile device.  And so, you know, most people
13  have their mobile devices with them all the time,
14  which means they're able to find matches anytime
15  they want.  You've got push notifications.  And so
16  they're receiving alerts and messages that, you
17  know, they've got new matches or they've received
18  new messages from people.
19          Also, our apps are designed to be
20  location-based.  And so they're not really -- it's
21  not really convenient to carry your gaming console
22  around with you.  And so while people are on the
23  move, whether or not it's traveling from home to
24  work or wherever they are, they're able to find new
25  singles in their area.
```

5. PAGE 17:03 TO 17:15 (RUNNING 00:00:43.317)

```
03      Q.      Well, just in general, how does Match
04  Group make money from its products?
05      A.      Gotcha.  Gotcha.
06              Yeah.  We sell subscriptions, and
07  what we call our consumables or our products.
08      Q.      Do you also offer in-app purchases?
09      A.      Yes.
10      Q.      Can you describe for me first, what are
11  subscriptions?
12      A.      Yes.  Subscriptions are essentially
13  renewable, paid memberships that allow you to access
14  additional premium features, and they can be
15  single-month or multi-month in length.
```

6. PAGE 17:22 TO 18:25 (RUNNING 00:01:34.618)

```
22  more details, but just in general, what are in-app
23  purchases from a Match Group perspective?
24      A.      In-app purchases can be either
25  subscriptions or consumables that are purchased via
00018:01  the -- within the app.
02      Q.      So what are some examples of Match
03  Group's, what you're calling consumables, in-app
04  purchases?
05      A.      Things such as a Super Like that you can
06  purchase on Tinder.  Or a Boost.  You know,
07  essentially, a Boost will expose you to and give you
08  more exposure to additional people for a fixed
09  period of time.
10      Q.      What is a Super Like?
11      A.      Super Like is essentially letting
12  someone else know that you're interested in them,
13  but it's -- it provides more emphasis on it so that
14  you can be differentiated.
15      Q.      If a Tinder user would like to purchase
16  a Super Like or a Boost, like, how does that work in
17  the app?
18      A.      Essentially, they can -- when they --
19  they can go into the app, decide that they want to
20  boost themselves for a period of time, click on the
21  button, you know, essentially, they will be
22  presented with the option for the Boost.
23              You can purchase, the in-app window
24  will pop up, and then touch your thumbprint, touch
25  ID, and you can go through with it.
```

7. **PAGE 20:15 TO 20:22 (RUNNING 00:00:21.737)**

```
15        Q.      In your role as senior vice president of
16  operations, are you familiar with Match Group's data
17  analytics work?
18        A.      Yes.  I'm -- I receive reports from them
19  on a regular basis.
20        Q.      Do you use those reports in making
21  decisions in your job?
22        A.      I do.
```

8. **PAGE 21:23 TO 21:25 (RUNNING 00:00:07.238)**

```
23              Do you have in front of you the
24  exhibit that we've marked as Exhibit PX-863?
25        A.      Yes.
```

9. **PAGE 22:10 TO 23:05 (RUNNING 00:01:14.411)**

```
10        Q.      Do you recognize the entirety of Exhibit
11  PX-863?
12        A.      Yes.
13        Q.      What is it?
14        A.      It's Tinder US.  It's Tinder US data on
15  downloads and revenue and unique users.
16        Q.      Does Match Group collect data of this
17  type during the ordinary course of its business?
18        A.      Yes.
19        Q.      Does Match Group compile data of this
20  type during the ordinary course of its business?
21        A.      Yes.
22        Q.      Do you use information of this type in
23  the ordinary course of conducting your business for
24  Match Group?
25        A.      I do.
00023:01        Q.      Does the information in this sheet, to
02  the best of your understanding, accurately reflect
03  Tinder's data as it is collected in the ordinary
04  course of business?
05        A.      Yes.
```

10. **PAGE 23:09 TO 23:17 (RUNNING 00:00:41.315)**

```
09              How can users access Tinder today?
10        A.      Through the iOS app, through the Android
11  app, and also through web, so mobile web and desktop
12  web.
13        Q.      When Tinder was initially launched in
14  2012, could users access it through the web?
15        A.      No.
16        Q.      When was Tinder launched on the web?
17        A.      Roughly 2017.
```

11. **PAGE 24:17 TO 25:05 (RUNNING 00:00:46.769)**

```
17        Q.      So what, if anything, did Match do to
18  attempt to grow Tinder through the web once it was
19  launched in 2017?
20        A.      There was PR.  There was quite a fair
21  bit of PR around it.  There was marketing campaign
22  pushes, et cetera, so...
23        Q.      Did Match do anything with the price of
24  Tinder through the web in order to attempt to
25  attract users?
00025:01        A.      It is cheaper than what it is in the app
02  stores.
03        Q.      Is Tinder through the web cheaper today
04  than Tinder through the app stores?
05        A.      Yes.
```

12. PAGE 25:14 TO 26:05 (RUNNING 00:01:08.980)

```
14        Q.       Has Tinder through the web been
15   successful?
16        A.       In the sense that it launched, not in
17   the sense of real numbers relative to the app sales.
18        Q.       What do you mean "not in the sense of
19   real numbers relative to" --
20        A.       The app sales just dominate.  I mean,
21   that's where the audience is.  That's -- you know,
22   the majority of our revenue continues to be driven
23   by the app sales, through the app sales.
24        Q.       So Tinder Online has been available
25   since 2017.
00026:01            Since that time, has the app version
02   of Tinder been increasingly successful, the same
03   level of success, or has it seen diminishing
04   success?
05        A.       It's seen increasing success.
```

13. PAGE 28:09 TO 28:22 (RUNNING 00:01:18.435)

```
09        Q.       So what percentage of Tinder revenue in
10   2020 came from the web version of Tinder?
12        Q.       Then what proportion of Tinder's revenue
13   in 2020 came from the mobile app version of Tinder,
14   irrespective of the particular platform?
16        Q.       In 2020, for how many years had the web
17   version of Tinder been available, roughly?
18        A.       Three, three years.
19        Q.       Had the web -- was the -- is the price
20   of Tinder on the web cheaper, more expensive or the
21   same than the version of Tinder through the app?
22        A.       It is cheaper.
```

14. PAGE 28:24 TO 30:25 (RUNNING 00:03:02.239)

```
24                 Has Match Group seen meaningful
25   switching from Tinder on mobile to Tinder on the
00029:01   web?
02        A.       No.
03        Q.       Do you have a view as to why not?
04        A.       Yeah.  I mean, that the apps just have
05   persistence; meaning, they're always on the phone.
06   You know, typically, on the homepage or, ideally, on
07   the homepage, which means you're going to access
08   it -- you know, I think that persistence is
09   important because, to me, it's out of sight, out of
10   mind.  And so, you know, I could be going to -- I
11   may be thinking about checking my messages, and if I
12   see the Tinder app there, I may think about clicking
13   on it even though that wasn't my original intention
14   for, you know, unlocking my phone.  Through that,
15   it's also able to push notifications to you, if
16   you've got new matches, you've got new messages.
17                 Again, you've got native swiping,
18   which we invented and which became famous on Tinder.
19   And then, obviously, you've got -- you know, our --
20   our apps are location-based.  And so that's a lot
21   smoother if you try to do things like swiping.  In a
22   browser, you can accidentally go back in the
23   browser, things like that.  It's just not smooth.
24                 So, ultimately, that's just where
25   our audience is and so we've sort of pushed the
00030:01   efforts on web, and we'd love to see more sort of
02   traffic and usage there, it's just not the same as
```

```
03  having an app.
04       Q.      One of the features you mentioned was
05  geolocation on the mobile app.
06              Can you explain why that feature of
07  mobile devices is important to users of a service
08  like Tinder?
09       A.      Yeah.
10              So we don't ask users for a fixed
11  location.  So back in the day of sort of websites,
12  you would typically ask -- you know, I would say,
13  I'm from Dallas, Texas.  The way that they work
14  today, most of the time, is that they don't
15  necessarily have to collect that information unless
16  it's for billing purposes.
17              And so the way the app works is it
18  will deliver singles in the area that you're in,
19  which means it also works when you are traveling,
20  when you are on the go, and so it's key for its
21  functionality.
22       Q.      You also testified that push
23  notifications are an important feature of mobile
24  app --
25       A.      Yes.
```

15. PAGE 31:22 TO 31:24 (RUNNING 00:00:14.074)

```
22       Q.      So the question is, can you please
23  explain why push notification is important to Match
24  for its product Tinder?
```

16. PAGE 32:01 TO 32:07 (RUNNING 00:00:21.645)

```
00032:01     A.      Yes, it will notify -- it will notify
02  the user if they have -- it's the main mechanism to
03  notify users if they have new messages, new matches,
04  essentially, like, telling you, you've got a new
05  text message or a new voicemail.
06       Q.      Why is that important for users of a
07  dating app like Tinder?
```

17. PAGE 32:10 TO 32:22 (RUNNING 00:00:45.483)

```
10       A.      It essentially increases activity on the
11  app, and ensures that, you know, users are
12  responsive and increasingly active.
13       Q.      Changing topics a bit.
14              For what types of mobile devices are
15  Match Group's app available?
16       A.      What types of mobile devices?  IOS and
17  Android devices.
18       Q.      In your capacity as senior vice
19  president of operations, are you involved with
20  Match Group's distribution of apps on both iOS and
21  Android?
22       A.      Yes.
```

18. PAGE 33:08 TO 33:16 (RUNNING 00:00:29.241)

```
08       Q.      How does Match Group distribute its app
09  on the iOS operating system?
10       A.      Through the App Store.
11       Q.      How else?
12       A.      The app itself, no other way.  That's
13  it.
14       Q.      Why is that?
15       A.      There's no other option.
16       Q.      Why is there no other option?
```

19. PAGE 33:18 TO 34:07 (RUNNING 00:01:15.461)

```
18       A.      Apple doesn't give you a choice.  You
19   have to use the App Store.
20       Q.      If it were permitted, would Match Group
21   consider distributing its apps to iOS users in some
22   other way?
23       A.      Yes, we -- we would explore that.
24       Q.      What benefits to Match would there be of
25   distributing Match Group's apps to consumers
00034:01   directly, and not through the App Store?
02       A.      We wouldn't have to use in-app payments,
03   or IAP, and I think that part is key.  Obviously,
04   that would -- you know, that depends what the
05   alternative would be, but that would result in, you
06   know, better margins.  It would allow us to price
07   our products cheaper, like we do on the web.
```

20. PAGE 34:14 TO 37:07 (RUNNING 00:03:47.190)

```
14               Does the requirement that Match
15   Group sell its apps through the App Store permit
16   Match Group to transact directly with the end users?
17       A.      We are not able to transact -- users are
18   not able to transact directly with us.
19       Q.      Would there be benefits to Match Group
20   from being able to transact directly with the end
21   users of your products?
22       A.      Yes.
23       Q.      What would some of those benefits be?
24       A.      Again, we would not pay the margins of
25   the 30 percent to Apple, which in turn would result
00035:01   in lower prices for customers.  Roughly, it costs
02   less than 5 percent, you know, to manage payments,
03   refunds, all of that.
04               If you look at PayPal, it's under
05   2 percent to use PayPal.  And the App Store, in-app
06   payments, PayPal is an option there, so I'm not sure
07   why we're paying 30 percent when it costs us less
08   than 2 percent to use exactly the same payment
09   method.
10               It's important also from a customer
11   relationship standpoint.  You know, customers are
12   used to approaching a brand directly for any of
13   their concerns.
14               So I would say, paying customers are
15   our priority.  So it's extremely strange and
16   abnormal for customers to have to reach out to the
17   main company for all general customer inquiries, and
18   then have to reach out to another company as it
19   pertains to the -- their paid experience.
20               So, you know, for example, we -- if
21   we -- if a user is contacting us and they're having
22   a poor experience, we're not able to issue them a
23   refund.  We have to point them to Apple.  If they
24   can't get a refund from Apple and they complain to
25   us, there's nothing we can do about it.
00036:01               And we've seen, you know -- we've
02   seen one-star ratings in the App Store because they
03   had a poor refund experience with Apple, which kind
04   of seems to be unfair because, you know, not only do
05   you have a poor customer experience, but, you know,
06   typically, what that means is if you have a poor
07   customer experience, you associate it directly with
08   that product, right.
09               So even if the product is working
10   100 percent and working great, if I have a poor
11   customer experience, I'm just going to think that
```

```
12  brand as a whole -- I'm just going to have negative
13  connotations with that brand.
14              In that case, it seems to be unfair
15  because we didn't manage that customer experience,
16  right.  When it came to the payment, we have no
17  choice.
18              So as a result -- and then we get a
19  negative one-star rating -- you know, we get a
20  run-star rating on the Apple App Store for something
21  which we have no control.  So I think, you know,
22  managing that customer relationship is going to be
23  important.
24              And then one other thing that we do,
25  when we manage the payment, we also use that
00037:01  information to provide additional checks which are
02  relevant in our category.  So we will run, for
03  example, a registered sex offender check for using
04  some of that billing information, and because when
05  we process users through IAP, we don't receive that
06  information, so we don't run registered sex offender
07  checks for iOS users.
```

21. PAGE 37:25 TO 38:11 (RUNNING 00:00:37.861)

```
25          Q.      Just to local sense, so does Match Group
00038:01  process customer purchases of either subscriptions
02  or in-app purchases for its iOS apps?
03          A.      Not directly, no.
04          Q.      So who does that?
05          A.      Apple does that.
06          Q.      Who else?
07          A.      No one else.
08          Q.      Why is that?
09          A.      So for products such as ours, we are
10  forced to use Apple's in-app payment system.
11          Q.      Forced how?
```

22. PAGE 38:13 TO 39:02 (RUNNING 00:00:45.619)

```
13          A.      If we -- if we don't do it, you know,
14  our app will not get approved.  If we are not using
15  in-app payments, our app will not get approved.
16          Q.      When you say "not get approved," you
17  mean not get approved by Apple; correct?
18          A.      Correct.
19          Q.      Does Match Group pay a fee to Apple in
20  connection with this in-app payment processing?
21          A.      Yes.
22          Q.      How much?
23          A.      It's 30 percent for subscribers under a
24  year, and it's 15 percent after a year, but
25  essentially, it equates to 30 percent because most
00039:01  daters are not subscribed to the app for longer than
02  that.
```

23. PAGE 39:16 TO 39:24 (RUNNING 00:00:32.729)

```
16          Q.      Assume that Apple imposed no
17  restrictions; what would Match do with respect to
18  payment processing within iOS?
19          A.       We would offer our own payment system.
20  We would run registered sex offender checks.  We
21  would reduce pricing, if users paid that through
22  that method.  And essentially, we would direct
23  customers, if they had refunds, directly to our
24  customer service.
```

24. **PAGE 41:12 TO 42:09 (RUNNING 00:01:23.496)**

```
12        Q.        In one of your earlier answers, you
13    mentioned that Match Group would prefer to use its
14    own payment processor on iOS; correct?
15        A.        Correct.
16        Q.        How do you know that Match Group could
17    successfully create its own payment processor?
18        A.        I mean, we've run -- I mean, I've done
19    payment processing and Match has and we've done it
20    for subscriptions for -- we've managed it for over
21    20 years now; probably longer than almost anyone out
22    there as it pertains to digital subscriptions.
23                  We've launched it on Google Play,
24    and I was part of that project.  But, you know, we
25    worked on -- we started rolling out, I believe,
00042:01    in -- around 2017, 2018, and that's been a success.
02        Q.        You just testified that we launched it
03    on Google Play in 2017 or 2018.
04                  What did you launch on Google Play
05    in 2017 or 2018?
06        A.        We launched an option for users to pay
07    directly using Tinder's payment system.  So I should
08    clarify.  It's on Android -- I should say, on
09    Android versus Google Play.
```

25. **PAGE 43:04 TO 44:19 (RUNNING 00:02:23.632)**

```
04        Q.        Mr. Ong, you just testified that
05    Match Group had developed its own payment processor
06    for Tinder for use on Android; correct?
07        A.        That's correct.
08        Q.        Is that payment processor currently in
09    use?
10        A.        Yes.
11        Q.        Can you explain how it works?
12        A.        Yes.  Essentially, users will select
13    what subscription package or what product they want
14    to purchase, and then they would be presented an
15    option to pay using Tinder's payment system or using
16    Google Play.
17        Q.        What price does Match Group charge for
18    purchases made through its payment processor on
19    Android, as compared to the price to consumers of
20    using Google Play?
21        A.        The same.
22        Q.        Why is that?
23        A.        Google requires us to have pricing
24    parity.
25        Q.        How does the sign-up process for using
00044:01    Tinder's payment processor on Android compare to
02    using Google's payment processor on Android?
03        A.        When you say the "sign-up process," you
04    mean the process of entering in the payment
05    information?
06        Q.        I'm just trying to get at from a user's
07    perspective, which requires more steps.  To use the
08    Tinder payment processor, or to use the Google
09    Android processor?
10        A.        If the user hasn't transacted before
11    using Tinder's payment system, they have to complete
12    more fields.  They have to fill in their credit card
13    or debit card information.
14                  So, you know, that's -- yeah, it's
15    quite a few fields versus clicking on Google Play.
16        Q.        So you charge the same price as Google,
17    and at least for the initial sign-up, it's more
18    difficult for the user to use Tinder's payment
```

```
19   processor than Google.
```

26. PAGE 45:01 TO 46:10 (RUNNING 00:02:02.142)

```
00045:01                      Has your payment processor been
      02   successful on Android?
      03         A.      Yes.
      04         Q.      Are -- is Match Group able to analyze
      05   which payment option users select?
      06         A.      Yes.
      07         Q.      How does it do that; does it do it by
      08   user account basis?
      09         A.      We can look at the user account, and we
      10   can see what payment option they picked,
      11   essentially, yes.
      12         Q.      Do you track that data?
      13         A.      Yes.
      14         Q.      What does it show?
```

```
      17         Q.      If you turn back to Exhibit PX-863, and
      18   if you turn to the page ending in MATCH-40, MATCH
      19   4-0.
      20         A.      Yeah.
      21         Q.      Does this document describe the revenue
      22   that Match has received from the Google Play option
      23   and also the Tinder payment processing option?
      24         A.      Yes.
      25         Q.      Can you explain what it shows?
00046:
```
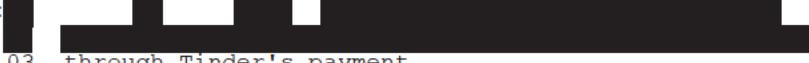
```
      03   through Tinder's payment.
      04         Q.      You're focusing on the year 2020;
      05   correct?
      06         A.      Correct.
      07         Q.      When did Match begin offering its own
      08   payment system for Tinder through Android?
      09         A.      I guess it was fully rolled out in --
      10   well, starting to be rolled out in 2019.
```

27. PAGE 46:13 TO 46:15 (RUNNING 00:00:11.743)

```
      13                      Do you believe that Tinder's own
      14   payment processor has been successful on Android?
      15         A.      Yes.
```

28. PAGE 46:17 TO 47:07 (RUNNING 00:01:05.129)

```
      17         Q.      To what, if anything, do you attribute
      18   that success?
      19         A.      I think users just -- I mean, you know,
      20   giving users choice.  Users also like to interact
      21   directly with the brand.  You know, they don't
      22   think -- when they are using a Tinder app, they
      23   don't think of that -- you know, they don't -- they
      24   think they're interacting with Tinder.  They don't
      25   think they're interacting with Google, or they're --
00047:01   you know, they're on the Android device, so from
      02   that perspective, they know that if they have any
      03   customer issues, as a subscriber, they can contact
      04   us, and we can resolve the issue.
      05         Q.      Have there been any security problems
      06   with Tinder's payment processor on Android?
      07         A.      No.
```

29. PAGE 47:15 TO 48:01 (RUNNING 00:00:34.157)

```
      15         Q.      Between using Tinder Pay directly and
      16   the -- compared to when the platform is controlling
```

```
17  the payment processing, have there been any security
18  improvements from using the direct method as opposed
19  to the platform?
20      A.      I don't know about security improvements
21  because I don't have full insight into the
22  platform's payment system.
23              I know from a safety perspective, we
24  can run the registered sex offender check and
25  explore avenues similar to that when we are
00048:01  controlling the payment system.
```

30. PAGE 48:04 TO 48:10 (RUNNING 00:00:18.129)

```
04              Who handles customer transactions
05  for Match Group's apps on iOS?
06      A.      Apple does.
07      Q.      Who provides customer service with
08  respect to billing and subscription issues from
09  Match Group's iOS users?
10      A.      Apple.
```

31. PAGE 48:14 TO 48:19 (RUNNING 00:00:16.556)

```
14      Q.      Does Match have its own customer service
15  group?
16      A.      Yes.
17      Q.      What restrictions does Apple impose on
18  Match's ability to provide customer service to users
19  on iOS?
```

32. PAGE 48:21 TO 51:06 (RUNNING 00:03:16.127)

```
21      A.      We're unable to provide refunds, and we
22  don't have any visibility into Apple's refund
23  policy.  So, you know, just -- just to clarify a
24  bit, you know, Match is -- you know, if you look at
25  our brands, we're very focused on customer
00049:

03              So we have full flexibility when we
04  are in control of the payment system.  We have full
05  refunds.  We have prorated refunds.  We can comp and
06  give free days to people.
07              What is -- you know, what is crucial
08  in that is that, you know, in order to provide a
09  refund, you need to be able to assess that
10  customer's activity and their profile.  So, you


18  experience.  We want to make sure that that person
19  is taken care of so that they will try the app
20  again.
21              You know, people -- there's a lot of
22  singles who date for -- you know, might be in a
23  relationship for a year, but then, you know, that --
24  that relationship ends, and they come back again.
25              So there's a lot of repeat behavior
00050:01  until, you know, that person eventually gets
02  married.
03              So it's -- you know, there's a
04  cyclical nature to this, and so it's important that
05  they have a good customer experience because even --
06  we want them to be successful, and if they are
```

13

```
07  successful, we want them to come back, you know, if,
08  let's say, that relationship falls out, so...
09        Q.      Again, how does Apple's restrictions
10  prevent Match from doing the things that you just
11  mentioned?
12        A.      We -- we can't -- we can't provide the
13  refund, nor does Apple when they're assessing
14  whether or not that person should get a refund or
15  not, be able to see any of that information to
16  determine that.
17        Q.      If an iOS user of Tinder would like to
18  cancel his or her subscription, who handles that
19  cancelation request?
20        A.      So they can either cancel it themselves
21  through Apple settings, and not through the app, or
22  they have to contact Apple's customer service.  We
23  have users contacting us to -- you know, to try to
24  get refunds.  We just have to direct them to Apple,
25  or if they don't get a good result, or they don't
00051:01  get any -- you know, a good customer service
02  experience or the refund that they wanted, they'll
03  try to contact us, and we'll have to --
04  unfortunately, we have to tell them there's not much
05  we can do, and we have to redirect them back to
06  Apple again.
```

33. PAGE 56:03 TO 56:04 (RUNNING 00:00:06.953)

```
03        Q.      In your experience, does the Apple App
04  Store drive users to Match Group's products?
```

34. PAGE 56:06 TO 57:01 (RUNNING 00:01:16.500)

```
06        A.      It's been a minimal contribution.
07              I've -- we've looked at data
08  historically, and typically it's in the ▓▓▓▓
09  digits.  So it's less than -- let's just say less
10  than ▓ percent has been driven through Apple either
11  featuring the apps, but, you know, some of it comes
12  through things like rankings, which I don't really
13  sort of -- would say it's Apple's contribution
14  because obviously as we do -- as we become more
15  popular, we go higher up the rankings, so there's
16  effort on our part, but about ▓ percent or
17  potentially more -- it depends by brand.  ▓ percent
18  of users are using the App Store as a vehicle to
19  search for the app, meaning they're going to the App
20  Store, typing in "Tinder."  So they already know
21  what they're looking for.  They just have to go
22  through the App Store in order to download the app.
23              So they're typing it in, finding the
24  app, and then downloading it, which essentially
25  means, we're driving users to the App Store, not the
00057:01  other way around.
```

35. PAGE 57:20 TO 57:22 (RUNNING 00:00:09.283)

```
20        Q.      I'm showing you a document that's
21  marked -- well, it's Bates stamped Apple App Store
22  06147190.
```

36. PAGE 58:08 TO 58:10 (RUNNING 00:00:08.483)

```
08        Q.      Now, do you see there's an e-mail from
09  you to someone at Apple dated June 7, 2018?
10        A.      I do.
```

37. PAGE 58:20 TO 59:16 (RUNNING 00:01:07.213)

```
20        Q.     Okay.  If you look at the second bullet
21  in your e-mail that says, "Rev share."
22                You see that?
23        A.     Yeah.  Yes.
24        Q.     The second sub-bullet under that reads,
25  "Apple drove minimal new discovery, approximately ▌
00059:01  percent, while the majority were users organically
02  looking for our apps, approximately ▌ percent."
03                Do you see that?
04        A.     Yes.
05        Q.     What did you mean when you wrote that?
06        A.     I meant that ▌ percent of our users
07  were typing in the brand, meaning Tinder, Match.
08  They weren't typing in "dating."  They were
09  specifically looking for the brand.  And so, you
10  know, essentially, we were driving users to the App
11  Store and Apple was only driving new users -- or
12  driving users to our app, and that contribution was
13  ▌ percent during that period.
14        Q.     So when Match Group drives users to
15  Apple's App Store, what impact does that have on
16  Apple?
```

38. PAGE 59:18 TO 60:18 (RUNNING 00:01:21.123)

```
18        A.     Well, if a -- I think there's a couple
19  of ways.
20                One is when they go to the App
21  Store, typically, what we'll see is we'll see
22  competitors -- you know, if someone types in
23  "Tinder," for example, within the App Store, they'll
24  see our app, but Apple is actually -- sells
25  advertising space just above that.  And so sometimes
00060:01  you will see our competitors.  I believe we've seen
02  sites like Ashley Madison, for example, be
03  advertised above -- so even though the user typed in
04  "Tinder," was looking for Tinder, they're first
05  presented with an ad, potentially, of a competitor,
06  and I've seen Ashley Madison there before, before
07  they can even download Tinder.  So they'll monetize
08  ads for other apps, you know, before the user can
09  even download the app.
10                Once the user downloads the apps,
11  obviously, if we're pushing users to the App Store,
12  they have to use in-app payments, and so they'll
13  take roughly 30 percent of any revenue gained from
14  that.
15        Q.     Okay.  Once the user has downloaded the
16  app onto iOS, what role does Apple play in
17  generating in-app purchases through a product like
18  Tinder?
```

39. PAGE 60:20 TO 60:23 (RUNNING 00:00:10.335)

```
20        A.     Nothing.
21        Q.     What percentage of the price that a user
22  pays for in-app purchases in a product like Tinder
23  does Apple take?
```

40. PAGE 60:25 TO 61:04 (RUNNING 00:00:13.926)

```
25        A.     Majority of the time in our use case, 30
00061:01  percent.
02        Q.     When Match Group innovates and drives
03  more in-app purchases on a product like Tinder, what
04  impact does that have on Apple?
```

41. PAGE 61:06 TO 61:18 (RUNNING 00:01:00.318)

```
06        A.      Apple takes 30 percent of those revenue
07   gains.
08        Q.      Have you raised this issue with Apple?
09        A.      We have.
10        Q.      What was Apple's response?
11        A.      It's just the way our rules work, and
12   this is -- these are our policies, and it's --
13   it's very hard to change them.  But I don't believe
14   that's the case, because we've seen recent changes
15   for digital goods and subscriptions in the recent --
16   just even in the past 12 months where virtual
17   one-on-one classes were paying 30 percent and now
18   they're not, so...
```

42. PAGE 62:03 TO 62:05 (RUNNING 00:00:07.010)

```
03        Q.      In your view, does Apple's developer
04   support justify it charging the 30 percent
05   commission it takes?
```

43. PAGE 62:07 TO 62:16 (RUNNING 00:00:31.719)

```
07        A.      No.
08        Q.      Why not?
09        A.      Because it provides support to apps who
10   are not paying the 30 percent.  Again, you know, a
11   lot of the time, they are promoting new features
12   that they're releasing that they want us to utilize.
13   A lot of the time, they're not features that we can
14   utilize, so...
15        Q.      What has been your experience with
16   Apple's App Review process?
```

44. PAGE 62:18 TO 63:03 (RUNNING 00:00:43.755)

```
18        A.      I think it's been an inconsistent
19   experience in terms of their guidelines and rules,
20   which they state are clear, but they clearly are
21   not.  And then, you know, it's just been time -- and
22   because of that, it's just been time-consuming for
23   us in terms of operating a business.  We've gone
24   back and forth multiple times on various app review
25   issues.  Many, many cycles, there have been times
00063:01   when it has last months, so...
02        Q.      Do you perceive Apple's app review
03   process to be a benefit to Match Group?
```

45. PAGE 63:05 TO 64:16 (RUNNING 00:01:57.455)

```
05        A.      I would say, majority of the time,
06   they're hindering us from releasing new changes and
07   slowing us down.
08        Q.      Can you give some specific examples of
09   what you identified as inconsistencies in the app
10   review process?
11        A.      Sure.
12                So they have released new policies
13   without informing us in advance.  So, basically, we
14   have no notice.  And then after the fact, we worked
15   with their team -- this was specific to some rate
16   card changes, basically the display of pricing and
17   products on our brands.
18                And the way we worked with them was,
19   essentially, we sent them a mock-up or a design in
20   advance.  So after this was sort of rolled out, we
21   sent a design or mock-up, just so that we wouldn't
22   have multiple iterations.  And we didn't actually
```

16

```
23  have to send it through app review yet, but we went
24  through their app business management team.
25              We then sent it to app review and
00064:01  reviewed it with app review.  And they said, this
02  design will be okay, you can proceed with your
03  engineering and development work and design work, so
04  that's what we did.  And we did it across multiple
05  brands because we had been provided the guidance
06  from Apple that this was looking good, and we had --
07  and they had reviewed it with multiple teams
08  including app review.
09              And, ultimately, when we submitted
10  it in full review, we then got rejected.  And so
11  there was a lot of back and forth, and a lot of it
12  was because their guidelines were not clear and
13  concise and, actually, subjective and up for
14  interpretation.
15              And so what you're -- what went over
16  for several months was --
```

46. PAGE 65:01 TO 65:17 (RUNNING 00:00:56.870)

```
00065:01              What we saw was -- again, I don't --
02  I don't know who's in app review, but we saw
03  approvals from certain app reviewers for the same
04  design, and then rejections.  We've seen
05  historically an app or a certain page be approved
06  more than five times by the app review -- app review
07  team, and then let's say on review eight of the same
08  page, which has not changed at all, suddenly get
09  rejected.
10              And then -- and so, you know, I
11  think there's even disagreement within the app
12  review team because, you know, there's -- the
13  guidelines were written in such a way where they
14  were opened up for subjective interpretation, so...
15      Q.      What impact, if any, does that process
16  have on Match Group's incentive to innovate within
17  the iOS ecosystem?
```

47. PAGE 65:19 TO 65:25 (RUNNING 00:00:23.324)

```
19      A.      I mean, it slows us down.  It doesn't
20  get our product -- our new features out to users as
21  quickly.  You know, and we end up burning
22  engineering and design cycles and product cycles
23  going back and forth on something that Apple itself
24  can't even agree on, versus getting new features
25  out.
```

48. PAGE 66:01 TO 66:04 (RUNNING 00:00:10.544)

```
00066:01              So you can imagine, you know,
02  that's -- essentially, we wasted a subset of
03  resources for -- I don't know, for essentially a
04  quarter.
```

49. PAGE 66:12 TO 66:24 (RUNNING 00:00:42.460)

```
12              Is Match Group able to tell through
13  which mobile platform users access Match Group's
14  apps like Tinder?
15      A.      Yes.
16      Q.      Have you -- has -- have you looked at
17  that?
18      A.      Yes.
19      Q.      What, if anything, have you learned
20  about how often Tinder's current iOS users use
21  Tinder on Android devices?
```

```
22      A.      The majority of people do not -- you
23   know, if their main device is an iOS device, they're
24   not using an Android device as well.
```

50. PAGE 67:15 TO 67:19 (RUNNING 00:00:14.774)

```
15      Q.      Just to get it -- again, I don't expect
16   you to know the exact percentage necessarily, but as
17   an order of magnitude, more or less than 5 percent
18   of users who are on Tinder iOS and then log on to
19   Tinder on Android?
```

51. PAGE 67:22 TO 67:22 (RUNNING 00:00:02.562)

```
22      A.      I don't know the answer to that.
```

52. PAGE 67:23 TO 68:05 (RUNNING 00:00:22.710)

```
23      Q.      Have you reached any conclusion about
24   whether Android is a substitute for iOS for
25   Match Group's products?
00068:01   A.      It is not a substitute.
02      Q.      Have you reached any conclusions about
03   whether web browsers are a substitute for iOS's --
04   for iOS for Match Group's products?
05      A.      It's not a substitute.
```

53. PAGE 69:17 TO 69:21 (RUNNING 00:00:22.470)

```
17      Q.      So in 2020, what percentage of total
18   Tinder revenue was attributable to iOS?
19      A.      ▆ percent.
20      Q.      Could Match Group simply abandon iOS and
21   develop its products solely for other platforms?
```

54. PAGE 69:23 TO 70:09 (RUNNING 00:00:41.245)

```
23      A.      No.
24      Q.      Why not?
25      A.      As you can see, it's got the majority of
00070:01   the distribution, and for a dating platform, that
02   would be -- that would be extremely destructive,
03   because essentially, it would be a negative
04   experience in terms of you wouldn't have those
05   users -- for the Android users to find as well.
06      Q.      Well, couldn't users just switch back
07   and forth between Android apps and iOS apps so they
08   could reach the total dating pool; couldn't users do
09   that?
```

55. PAGE 70:11 TO 70:15 (RUNNING 00:00:13.697)

```
11      A.      Well, they don't switch between Android
12   and the -- the majority do not switch between the
13   Android and iOS.  There's nuances to each platform,
14   and I think once people become comfortable, they
15   stick to the one.
```

56. PAGE 72:07 TO 72:10 (RUNNING 00:00:08.841)

```
07      Q.      Does the majority of Match Group's
08   revenues come from its iOS apps as opposed to
09   Android apps or websites?
10      A.      Yes.
```

57. PAGE 73:01 TO 73:04 (RUNNING 00:00:12.493)

```
00073:01   Q.      Is there a brand operated by Match Group
02   that has same subscription price between mobile apps
03   and a website?
04      A.      I'm not -- I'm not sure.
```

58. **PAGE 73:12 TO 73:14 (RUNNING 00:00:12.096)**

```
12       Q.      Between iOS apps and Android apps for
13   the same brand, are the prices different?
14       A.      Usually, they are the same.
```

59. **PAGE 73:23 TO 74:07 (RUNNING 00:00:32.353)**

```
23       Q.      When you say "competitive pricing," what
24   our products are you comparing Match Group's
25   products against?
00074:01       A.      There's plenty of competitors.  We've
02   got Bumble.  We've got eHarmony.  We've got the apps
03   within Spark networks.  There's plenty of others.
04   Obviously, within our own portfolio as well, we have
05   to reference -- I mean, technically, they're
06   competing against each other as well for the
07   attention of the user.
```

60. **PAGE 74:08 TO 74:10 (RUNNING 00:00:13.076)**

```
08       Q.      For pricing of products offered on iOS
09   native apps, did Apple's commission on internet
10   purchases affect Match Group's pricing decisions?
```

61. **PAGE 74:12 TO 74:12 (RUNNING 00:00:00.872)**

```
12       A.      Yes.
```

62. **PAGE 84:01 TO 84:03 (RUNNING 00:00:09.421)**

```
00084:01       Q.      Without Apple's 30 percent commission,
02   would Tinder have been able to offer its products at
03   a lower price than its current prices?
```

63. **PAGE 84:05 TO 84:06 (RUNNING 00:00:04.948)**

```
05       A.      If Apple allowed it, Tinder would be
06   able to do that.
```

64. **PAGE 84:22 TO 85:03 (RUNNING 00:00:12.596)**

```
22       Q.      So if Apple didn't require pricing
23   parity --
24       A.      Yeah.  That's correct.
25       Q.      -- Tinder could have offered lower
00085:01   prices without having to share 30 percent of its
02   revenue with Apple?
03       A.      Correct.
```

65. **PAGE 85:05 TO 85:07 (RUNNING 00:00:05.227)**

```
05       Q.      Same answer as to in-app purchases;
06   correct?
07       A.      Yes.  Yes.
```

66. **PAGE 120:12 TO 120:13 (RUNNING 00:00:07.334)**

```
12       Q.      The question was, there are portable
13   gaming devices in existence; is that correct?
```

67. **PAGE 120:16 TO 120:21 (RUNNING 00:00:15.582)**

```
16       A.      I don't think they work once you leave
17   the house unless it's got a SIM card in it, or
18   unless you automatically transfer to another WiFi
19   network.
20       Q.      Right.  But the question was portable
21   gaming devices exist; correct?
```

68. **PAGE 120:24 TO 120:25 (RUNNING 00:00:04.919)**

```
24       A.      I think portable is one thing.  Mobile
```

```
25  is completely different.
```

69. PAGE 121:02 TO 121:04 (RUNNING 00:00:08.747)

```
02      A.      I don't think I can use a Nintendo
03  Switch and maintain connectivity while I'm driving
04  from one place to the next -- to another.
```

70. PAGE 152:04 TO 152:23 (RUNNING 00:01:37.081)

```
04      Q.      So let's go back to Plaintiff's Exhibit
05  865.
06      A.      8-6-5.
07              Okay.
08      Q.      So on the e-mail with Sheree Chang,
09  under the second topic, revenue share, there's a
10  bullet point that begins, "Apple drove minimal new
11  discovery, approximately █ percent."
12              Do you see that?
13      A.      Yes.  Yes.
14      Q.      The rest of this sentence reads, "While
15  the majority were users organically looking for
16  apps, approximately █ percent"; is that correct?
17      A.      That's right.
18      Q.      Where did that data come from?
19      A.      It came from a combination of Apple's
20  own analytics and, I believe, App Annie data.
21      Q.      How do you know that?
22      A.      It was -- I was informed by the
23  analytics team who pulled that information.
```

71. PAGE 158:04 TO 159:14 (RUNNING 00:03:06.126)

```
04         Q.      How does Match Group inform users of the
05  option to purchase content outside of the -- of the
06  iOS app, if at all?
07         A.      Yeah.  I mean, the user essentially has
08  to know about it.  The user has to essentially know
09  about it because Apple doesn't let us send push
10  notifications or do any marketing by the app.
11              I mean, I think the guideline states
12  directly or indirectly.  So the user would
13  essentially have to know about it.
14         Q.      Has Tinder ever tried to communicate
15  with Apple about the possibility of communicating
16  the purchase option outside of the iOS app?
17         A.      I've had conversations with Apple about
18  that.
19         Q.      So you have tried to communicate with
20  Apple about the possibility of communicating with
21  users about the purchase option outside of the iOS
22  app?
23         A.      Yes, but I was misinformed during that
24  conversation, or what I recall of that conversation
25  because I believe we were told we could e-mail users
00159:01  because it was outside of the app, but when I read
02  the guidelines and we requested -- when we clarified
03  with app business management, they told us you could
04  not e-mail them if you collected that e-mail address
05  via Apple.
06              So if the user signed up via the iOS
07  app, which the majority did have, then you would not
08  be able to use that information because it was
09  collected during the iOS sign-up process.
10              So essentially, what that means is
11  we could stick up a bunch of billboards, we could
12  spend millions on TV commercials, but we can't send
13  e-mails, and we can't send push notifications
```

14 because that would be within the app, so...

72. PAGE 162:03 TO 162:22 (RUNNING 00:01:11.091)

03   Have you had conversations with
04 Apple about whether users are entitled to refunds?
05   A.   I've had conversations flagging the
06 concern that we're not able to refund the users
07 effectively, that people are complaining about not
08 getting refunds, and that, really, Apple doesn't --
09 number one, doesn't have the information to make
10 that decision, because they don't have customer data
11 that we have, or the customer profile, or the
12 customer behavior that they've exhibited.
13   And for us, I think -- you know, we
14 have policies that are extremely lenient. We can do
15 all sorts of different -- we can offer prorated
16 refunds. We can offer compensation. We can give
17 free add-ons or consumables.
18   We can do a lot of things to ensure
19 that we retain the customer, but we don't have full
20 control of our customer relationship.
21   I've communicated that fact to Apple
22 on multiple occasions.

73. PAGE 167:01 TO 167:04 (RUNNING 00:00:19.844)

00167:01   Q.   My question is: Could Tinder provide a
02 coupon, a gift card, or some other valuable
03 consideration to customers who have asked for
04 refunds?

74. PAGE 167:06 TO 167:20 (RUNNING 00:00:49.032)

06   A.   Again, in order to send out a gift card,
07 we would need to collect some of the customer's
08 information, and Apple's got data minimization
09 policies that prevent us from collecting some of
10 that information.
11   If Apple wants to collect that
12 payment -- Apple collected the payment credentials
13 from the user -- collect the payment from the user,
14 did not refund the user, or refused to refund that
15 user, and then somehow you're asking the developer
16 to somehow issue a coupon of some sort after the
17 customer has already been frustrated by Apple not
18 providing the refund in the first place.
19   I think the onus is on Apple,
20 especially when you're charging 30 percent.

75. PAGE 169:24 TO 170:08 (RUNNING 00:00:40.959)

24   Q.   Okay. Now, earlier you discussed sex
25 offender screening; correct?
00170:01   A.   Correct.
02   Q.   The Match Group brands use credit card
03 payment processing on Android; is that correct?
04   A.   Many of them do, yes.
05   Q.   Does Tinder?
06   A.   Yes, in addition to Google Play.
07   Q.   Does Match?
08   A.   Yes.

76. PAGE 170:10 TO 170:19 (RUNNING 00:00:36.703)

10   So for those customers that use the
11 Android credit card purchasing system, does Match
12 Group screen for sex offenders using that
13 information?
14   A.   Using Google Play or using Tinder's

```
15  payment credit card system on Android?
16      Q.      Does Match Group screen for sex offender
17  risk using information collected from the credit
18  card purchasing process via Android?
19      A.      Yes, we do.
```

77. PAGE 171:14 TO 172:16 (RUNNING 00:02:03.542)

```
14          Q.      Have you ever asked Apple whether they
15  would share with you credit card data for the
16  purpose of sex offender screening?
17      A.      Yes.  And also for age verification
18  because we have users who are under 18 who are able
19  to download the Tinder app, even though Apple has a
20  date of birth, which is under 18.
21                  So both age verification issues and
22  registered sex offenders, we have discussed with
23  Apple.
24      Q.      And who at Apple did you discuss this
25  with?
00172:01    A.      We discussed it with multiple folks.
02  There was more than five people from the Apple side,
03  but there was Chip on the app business management
04  team.  I believe last name Canter.
05                  Who else?  Folks from app business
06  management, and then some of the other folks were
07  developers or product folks from Apple, but I can't
08  I can't -- I can't recall their names.
09      Q.      When did this conversation take place?
10      A.      We've had it multiple times.  We've had
11  it recently as within the last year.  And there have
12  been multiple conversations about that, but we've
13  brought it up in private conversations to that as
14  well.
15                  But I think there have been more
16  conversations about it in the last 12 months.
```

78. PAGE 172:18 TO 173:06 (RUNNING 00:01:01.544)

```
18                  What did these individuals from
19  Apple tell you during these conversations?
20      A.      They see our concerns.  They see -- they
21  feel that it's a good point, but they have to be --
22  they have to think about that Apple payment system,
23  and how it potentially could affect other developers
24  as a whole, and, again, you know, this is -- this is
25  a story about Apple's payment system needing to be a
00173:01  one-size-fits-all for the developers that feels it
02  needs to charge -- feels it needs to force to use
03  IAP, whereas if we were to manage our own payment
04  system or at least were given that option, we're
05  building payment systems and safety-related systems
06  that are relevant for our users.
```

79. PAGE 182:20 TO 183:25 (RUNNING 00:01:38.542)

```
20      Q.      You testified that on Tinder's iOS app,
21  the price of the basic subscription is $9.99 per
22  month.
23                  At which price is that same
24  subscription offered through the web browser
25  currently in the United States?
00183:01    A.      At what price?
02      Q.      Yes.
03      A.      I don't recall the specific price, but
04  it could be -- it varies by market, so they can be
05  priced -- I've seen instances where it's 10 percent
06  cheaper.  I've seen instances where it's 15 percent
```

```
07  cheaper.  I've seen instances where it's 20
08  percent-plus cheaper, but I don't recall -- I don't
09  recall the US-specific web price.
10       Q.      When you say it depends on the markets,
11  you're talking about the different countries, not
12  within regional markets within the same country;
13  correct?
14       A.      That's correct.
15       Q.      Same question, just in case you know off
16  the top of your head.  You testified that on
17  Tinder's iOS app, the price of the Gold subscription
18  is $29.99 per month.
19                  To your knowledge, at what -- which
20  price is that same subscription offered through the
21  web browser currently in the United States?
22       A.      Yeah.  Same answer as I had prior.  I
23  don't recall the specific, but I know that by market
24  or by country, it can vary anywhere between 10 to,
25  you know, 20 percent-plus, I've seen.
```

Epic Games, Inc. v. Apple Inc., No. 4:20-cv-05640-YGR-TSH (N.D. Cal.)

Deposition Designation of Phillip Shoemaker (Volume 1 & 2)
(January 12, 2021)
(January 14, 2021)

Time

Epic Games, Inc.'s Designations (Blue Highlight)	Apple Inc.'s Designations (Yellow Highlight)
41 minutes 22 seconds	16 minutes 41 seconds

24

Shoemaker, Phillip B. (Vol. 01) - January 12, 2021   1 CLIP (RUNNING 00:46:50.303)

---

76 SEGMENTS (RUNNING 00:46:50.303)

---

1. PAGE 19:13 TO 19:15 (RUNNING 00:00:02.505)

```
13          THE VIDEOGRAPHER:  Will the reporter please
14   swear in the witness.
15          Thank you.
```

2. PAGE 19:17 TO 19:21 (RUNNING 00:00:11.132)

```
17             PHILLIP B. SHOEMAKER,
18   having been first duly sworn by the reporter, was
19          examined and testified as follows:
20
21          THE WITNESS:  Yes, I do.
```

3. PAGE 20:08 TO 20:09 (RUNNING 00:00:05.125)

```
08          Please state your full name for the record.
09       A   My name is Phillip Burton Shoemaker.
```

4. PAGE 28:24 TO 29:01 (RUNNING 00:00:07.143)

```
24       Q   And it says that you worked at Apple
25   beginning at March 2009; is that right?
00029:01      A   That's correct.
```

5. PAGE 31:03 TO 31:05 (RUNNING 00:00:06.347)

```
03       Q   And what was your job description, as
04   explained to you at the time?
05       A   To build the App Store Review team.
```

6. PAGE 35:22 TO 36:01 (RUNNING 00:00:16.825)

```
22       Q   And what were the qualifications of the
23   then existing reviewers?
24       A   Qualifications were they could breathe,
25   they could think, and typically they came from the
00036:01  App Store -- or sorry, the Apple genius stores.
```

7. PAGE 36:02 TO 37:05 (RUNNING 00:01:30.290)

```
02   They were ex-Apple geniuses that we'd pull into the
03   team.
04       Q   And what kind of training did they have for
05   their role as reviewers?
06       A   We did a -- once they joined the company,
07   we put them through a multi-month process of them
08   learning the tools that we used to review apps, and
09   then go through the Wiki or knowledge base, if you
10   will, of what we allow in apps and what we don't
11   allow in apps.
12          And then a lot of the process focused on
13   who to send the app to when you have questions, who
14   to send the app to when you've done reviewed it and
15   you're happy and you want to approve it, and who to
16   send the app to when you're unhappy with the app and
17   want to reject it.
18          So it came a lot around understanding what
19   Apple would tolerate dand what they wouldn't tolerate
20   with regards to features within the app.
21       Q   Okay.
```

25

```
       22            And you mentioned a multi-month process and
       23    a Wiki, et cetera.  Was all that in place already
       24    when you arrived, or are these things that you
       25    instituted?
00037:01       A    Some of it was in place.  I refined most of
       02    that over time.  The multi-month process became a
       03    two-week process under my helm, and we put out
       04    guidelines rather than us having to guess at what's
       05    allowed and what's not allowed.
```

8. PAGE 37:24 TO 38:07 (RUNNING 00:00:27.317)

```
       24            Q    And what were the hiring criteria for new
       25    team members?
00038:01       A    That they understood how to use a Mac, that
       02    they understood how to use an iPhone, that they
       03    understood a little about the Apple brand.  In that
       04    first year, we were literally only hiring people
       05    that had iPhones, had Macs, and came out of
       06    somewhere within Apple, whether it was the Apple
       07    stores or Apple corporate.
```

9. PAGE 38:08 TO 38:18 (RUNNING 00:00:31.740)

```
       08            Q    And have those criteria changed over time?
       09            A    Yes.  They changed over time because we
       10    found that people outside of Apple could understand
       11    how to protect the Apple brand.  We didn't have to
       12    rely on people that had drunk the Kool-aid, so to
       13    speak.
       14            And we wanted to make sure that -- that
       15    there were people that we could bring from all walks
       16    of life to be able to review apps.  It wasn't just
       17    an Apple employee thing.  It's something we could
       18    roll out to a larger audience.
```

10. PAGE 44:03 TO 44:05 (RUNNING 00:00:09.501)

```
       03            Q    How many times were you deposed in your
       04    capacity as an Apple employee?
       05            A    Roughly, I believe, about five times.
```

11. PAGE 44:17 TO 44:20 (RUNNING 00:00:10.379)

```
       17            Q    And do you recall generally what topics
       18    were you asked by Apple to be deposed as, as Apple's
       19    representative?
       20            A    Always App Store related.
```

12. PAGE 45:24 TO 46:02 (RUNNING 00:00:09.578)

```
       24            Fair to say that your understanding is that
       25    during your tenure, Apple considered you a trusted
00046:01    representative of the company?
       02            A    Yes, that is correct.
```

13. PAGE 56:13 TO 56:17 (RUNNING 00:00:15.988)

```
       13            How long does the human review process
       14    typically take?
       15            A    The numbers we've quoted in the past are
       16    about 13 minutes per app when it's a new app.  About
       17    six minutes per app when it's an updated app.
```

14. PAGE 57:05 TO 57:06 (RUNNING 00:00:04.030)

```
       05            I have been gone for five years.  Right.
       06    So a lot may have changed.
```

15. PAGE 63:22 TO 63:24 (RUNNING 00:00:13.946)

```
22              MR. EVEN:  So I would like to introduce
23     Exhibit 98.  That's Tab 36, Amal.
24              And Exhibit 99.  That's Tab 37.
```

16. PAGE 64:01 TO 64:12 (RUNNING 00:00:22.341)

```
00064:01              (Whereupon Shoemaker Exhibit 98 was
      02              marked for identification and
      03              attached hereto.)
      04              (Whereupon Shoemaker Exhibit 99 was
      05              marked for identification and
      06              attached hereto.)
      07     BY MR. EVEN:
      08          Q    So while Amal is making that available to
      09     you, the first article I'm referring to is an
      10     article from December 2017 named, "A Modern Content
      11     Store."
      12              Is that an article that you wrote?
```

17. PAGE 64:13 TO 64:20 (RUNNING 00:00:25.971)

```
13          A    Yes, it is.
14          Q    In this article, one of the predicates of
15     it, you begin by saying that there's been no radical
16     innovation in the way app stores operate over the
17     past 10 to 20 years.
18              Has there been any radical innovation in
19     app stores since 2017?
20          A    I don't believe so.
```

18. PAGE 66:01 TO 66:24 (RUNNING 00:01:31.341)

```
00066:01              And is this a correct copy of your
      02     December 2017 article?
      03          A    It appears to be, yeah.
      04          Q    And if you look at the end of the first
      05     paragraph and the beginning of the second paragraph,
      06     after you point out that there has been no radical
      07     innovation, you say (as read and/or reflected:)
      08                 Today we are in dire need of a
      09              revolution.  We need digital stores
      10              that service multiple platforms,
      11              et cetera.
      12              Do you see that?
      13          A    Yes, I do.
      14          Q    And you wrote that?
      15          A    Yes, I did.
      16          Q    In your view, and based on your experience,
      17     how would a content store or an app store servicing
      18     both iOS and Android, for example, which I get is
      19     what you say by "multiple platforms," affect
      20     competition between Apple and Google?
      21          A    Well, I think the first thing is that this
      22     would give us an alternate app store, which we can
      23     download apps for our devices.  Right now there's
      24     only one for iOS.
```

19. PAGE 66:25 TO 67:04 (RUNNING 00:00:16.010)

```
25              For Android, there's numerous, but for iOS,
00067:01     there's only one.
      02              I'm not sure how that would change or
      03     affect competition between the two platforms.  I'm
      04     not really certain.
```

20. PAGE 67:06 TO 67:09 (RUNNING 00:00:11.118)

```
06              Could a Multiplatform App Store at least
```

27

```
07    make switching between the two platforms easier for
08    users?
09         A    Yes, I believe it would.
```

21. PAGE 69:20 TO 70:03 (RUNNING 00:00:26.616)

```
20         Q    If we go to page 3 of this article, at the
21    top you write (as read and/or reflected:)
22                   Over time I realized that the
23              rules were often arbitrary,
24              arguable, and created by middle
25              aged white man ...
00070:01             Which you are one, as am I.  So ...
02                   Turning to arbitrary first, which rules did
03    you consider to be arbitrary?
```

22. PAGE 71:12 TO 71:24 (RUNNING 00:00:45.684)

```
12              At the time a good one is App
13    Recommendation Apps.  Right.  Apple was fine for the
14    first five years of their life of the App Store life
15    with having app -- an app list apps that they
16    recommend for you to download.
17              But Apple got tired of that space because
18    it was driving more volume than their own App Store
19    was, their App Store charts, and decided to remove
20    that whole category of apps.
21              And many companies went out of business
22    because of that change.  They built entire company
23    around this feature that Apple decided to change.
24              So that was another arbitrary decision.
```

23. PAGE 72:01 TO 72:15 (RUNNING 00:00:40.350)

```
00072:01             You also called the rules arguable.
02              What did you mean by that?
03         A    Well, it's objectionable material.  Right.
04    If you look at what's porn.  Right.  I'll see when
05    I -- I'll know it when I see it.  Those were a lot
06    of the guidelines.  If you look at the guidelines
07    and you read them, you'll see that most are written
08    in a gray, a very subjective manner.
09              And developers read them one way, create
10    time, spend time, spend money to build an app and
11    submit it and we reject it because we interpret that
12    line differently.
13              When they're arguable, they're really
14    difficult to enforce, and it gets -- it breeds a lot
15    of anger, hence, my numerous death threats.
```

24. PAGE 72:17 TO 73:20 (RUNNING 00:01:42.660)

```
17              Is there a reason why Apple, to your
18    understanding, have you heard discussions as to why
19    Apple moderates content on the App Store but not on
20    the phone more generally through, for instance,
21    Safari?
22         A    Well, I mean, it's tough.  Right.  The
23    content -- when you're in Safari, you don't say,
24    okay, Apple has vetted all the content I can find
25    out on the Internet.  Right.  They -- that would be
00073:01    ludicrous.  Right.  You can't do that.
02              On the App Store, Apple from Day 1 says, we
03    want to protect our customers.  And so they will
04    moderate content that goes through the App Store.
05    Apple has control of that.  Apple has no control
06    over what websites are created and what content is
07    going to be put on them.
08              Now, sure they could do some of these
```

28

```
09   ridiculous services that turn everything Disneyesque
10   that you can find on your iPhone, but that will
11   eliminate a large percentage of the population.
12          I think the Internet is intended to be free
13   to some extent, whereas, the App Store is about --
14   one of the key things we learned building the App
15   Store is that approving something that makes Apple
16   look really bad hurts.
17          It hurts Apple.  It hurts their stock
18   price.  It hurts the shareholders.  It can be very
19   bad.  So the App Store is a vetted, curated store,
20   whereas, the Internet is not curated by anyone.
```

25. PAGE 73:21 TO 74:05 (RUNNING 00:00:29.477)

```
21          Q   And so if I understand you correctly, what
22   you're saying is that Apple believes anything that
23   goes through the Apple App Store essentially has the
24   impromptu of Apple on it because of the approval
25   process?
00074:01    A   That is correct.
02          Q   Okay.
03          And would the same impromptu attach to an
04   app downloaded from a different store?
05          A   No.  I can't imagine it would.
```

26. PAGE 75:14 TO 77:02 (RUNNING 00:02:02.262)

```
14          Is that an article that you've penned
15   around late March 2019?
16          A   Yes, it is.
17          Q   If you go to page 5.  At the penultimate
18   paragraph, you see it begins with (as read and/or
19   reflected:)
20              Over the years, Apple has
21          struggled with using the App Store
22          as a weapon against competitors.
23          A   Yes, I see that.
24          Q   What did you mean by that?
25          A   Yeah.  Interesting line, in retrospect.
00076:01        The App Store was -- for a while was one of
02   those places that everyone wanted to purchase space,
03   everyone wanted to have an app from the App Store.
04   And we saw that through the review process, the
05   number of submissions, et cetera.
06          There were times when competing apps, apps
07   that we could arguably say compete with Apple in
08   some way or another, like Google Voice or
09   Rhapsody -- or Rhapsody Music subscription, faced a
10   lot of barriers in getting approved.
11          And, to me, that was, you know, it was
12   curious.  Other apps didn't have this problem, but
13   we spent a lot of time thinking on what the slippery
14   slope implications were of approving an app like
15   Google Voice.
16          Does that mean that people will stop using
17   the phone as a phone?
18          Will your phone number disappear?
19          Will the iPhone disappear, right, in guise
20   of a Google phone or something like that?
21          There was always a lot of talk and
22   conjecture about that internally.
23          But Google Voice and Rhapsody faced
24   daunting -- Google Voice took a year to approve.  A
25   year.  And I had to call the developer every couple
00077:01   of weeks, or get an angry phone call from the
02   developer every couple of weeks.
```

27. PAGE 78:13 TO 78:24 (RUNNING 00:00:31.039)

```
13      Q   On page 6 you note that Apple Arcade is the
14   type of app that Apple has consistently disallowed
15   on the store.
16          Do you see that?
17      A   Yes, I do.
18      Q   What is the guideline that Apple Arcade
19   violates, in your view?
20      A   A store within a store.  It was an
21   overarching rule that Apple had for many years, you
22   could not have a store within a store.  An app that
23   made other apps available within it was absolutely
24   not allowed.
```

28. PAGE 79:13 TO 80:10 (RUNNING 00:01:08.107)

```
13          Going to page 8 under the heading (as read
14   and/or reflected:)
15              Apple needs to play fair.
16          You write (as read and/or reflected:)
17              With the App Store being the
18              only way to install apps on the
19              iPhone and iPad, Apple has complete
20              and unprecedented power over their
21              customers' devices.
22          Do you see that?
23      A   Yes, I do.
24      Q   What are the options of a developer that's
25   unhappy with Apple to just leave the iOS platform
00080:01   and move to another platform?
02      A   They can move to Android.  That's
03   80 percent of the devices in the world.  Right.  I
04   mean, that's one alternative is to just pull
05   everything out of iOS and put it entirely on
06   Android.  That gets the majority of the world's
07   apps.  Right.
08      Q   In your experience, did most app developers
09   consider that a viable option for them?
10      A   No.  No, they didn't.
```

29. PAGE 80:20 TO 81:01 (RUNNING 00:00:29.753)

```
20      Q   Have you ever heard of developer
21   considering leaving iOS to move to a game console?
22      A   No, I have not.
23      Q   Did there come a time when you were
24   interviewed by congressional staffers as part of an
25   investigation by U.S. Congress?
00081:01   A   I recall.
```

30. PAGE 84:16 TO 85:08 (RUNNING 00:01:14.294)

```
16      Q   The report also states that you recalled an
17   instance when an app developer's compliant
18   application was rejected from the App Store, and
19   then the technology was appropriated by Apple for
20   its own offerings.
21          Do you recall saying that to the staffers?
22      A   The technology wasn't appropriated.  The
23   idea was appropriated.  The technology was still
24   inherent in the app, but Apple released a feature, a
25   similar feature about a year later.
00085:01   Q   And your understanding was that that
02   rejection from the App Store was not justified under
03   the guidelines?
04      A   That is correct.
05      Q   And so this would be an example of Apple
06   making sure it has a first-mover advantage through
```

30

```
07    the review process?
08         A    Yeah, I think so.
```

31. PAGE 88:02 TO 88:08 (RUNNING 00:00:30.521)

```
02              Do you remember when you thought that Apple
03    executives found reasons you thought were pretextual
04    for the non-approval of apps, the rejection of apps?
05         A    Yes.
06         Q    Can you give me an example of an app that
07    you thought was rejected on pretextual grounds?
08         A    Google Voice.
```

32. PAGE 88:09 TO 88:10 (RUNNING 00:00:08.180)

```
09         Q    Any others?
10         A    That's the only one I can remember.
```

33. PAGE 100:15 TO 100:18 (RUNNING 00:00:09.760)

```
15         Q    What were the numbers by the time you left
16    Apple?
17         A    By the time I left Apple, we were reviewing
18    about 100,000 apps per week.
```

34. PAGE 101:03 TO 101:10 (RUNNING 00:00:18.913)

```
03         Q    And you also say that this leads to an
04    increased number of mistakes being made.
05              Do you see that?
06         A    Yes, I do.
07         Q    And mistakes are when apps are being
08    approved that should be rejected?
09         A    Apps that are being approved that should be
10    rejected and rejected that should be approved, yes.
```

35. PAGE 108:10 TO 110:07 (RUNNING 00:02:47.800)

```
10         Q    Why does the review team need a set of
11    rules that are not open to the developers?
12         A     We crafted the guidelines to be very
13    subjective.  So we did not -- so we allowed
14    developers to try stuff, right, to push the
15    envelope, to try to show us something that's
16    allowable.  And we learned over the years that
17    developers will try interesting things, some of
18    which we like, and some of which we don't like.
19              But if we had very black and white rules,
20    developers would not have typically pushed the
21    envelope and tried to get interesting things into
22    the store.
23              So we wanted the guidelines to be
24    subjective for a while in order to see what type of
25    content, what type of apps we were going to get.
00109:01         Now, having said that, look, one of the
02    very first apps that we had an issue with was called
03    "Baby Shaker."  It was in the first three weeks of
04    my hiring.  And for all intents and purposes, that
05    didn't violate any guidelines, and three sets of
06    eyes.
07              This is when three reviewers would review
08    it.  They approved it.  Apple stock went down.  I
09    got a call from Steve.  I got a call from Al Gore's
10    office.  We got -- we had people picketing outside
11    of Apple because of one app approval that should not
12    have been approved.
13              And it was about quieting a baby by gently
14    shaking the phone, but if you shook it really hard,
15    you killed the baby.
16              And so that is the reason why we needed to
```

```
17    have more refined guidelines internally because
18    reviewers, they don't see the forest for the trees.
19    This was a dumb app.
20           If you shook it, it put X's over
21    the baby -- a picture of the baby's eyes.  No baby
22    was harmed in the making of this app.
23           But perception was that Apple's okay with
24    shaking babies.  So we'd have to reject -- or so we
25    got picketed.  And so we got a lot of bad press from
00110:01  that.  That's why we needed something a little more
02    defined than just the guidelines because the
03    guidelines are subjective.
04       Q   Is one of the goals of the review process
05    to protect -- to protect Apple's goodwill?
06       A   Yes.  It's to protect Apple's brand for
07    sure.
```

36. PAGE 117:01 TO 117:19 (RUNNING 00:00:49.499)

```
00117:01          Q   In Marketing Text, there's a guideline
02    about cross-platform information.
03           Do you see that?
04       A   Yes, I do.
05       Q   What is the goal of this guideline?
06       A   Well, for the guideline specifically, I can
07    address some points of it.  Not -- it won't be
08    complete.
09           But one of the issues that we always had is
10    that developers that create a cross-platform app
11    like to put in the marketing text for the App Store,
12    iOS App Store, they want to tell them -- tell you
13    about the features in their Android app.  It made no
14    sense.
15           So we didn't want that kind of information
16    in the iOS App Store.
17       Q   Did you have any list of bad words that
18    were searched for, such as Android or Windows?
19       A   I'm sure we did.
```

37. PAGE 117:20 TO 117:22 (RUNNING 00:00:08.196)

```
20       Q   And were apps generally prohibited from
21    pointing to their availability on other platforms?
22       A   Yes, they were.
```

38. PAGE 124:17 TO 124:22 (RUNNING 00:00:18.446)

```
17       Q   If you turn to Exhibit 102.  This is a
18    document dated March 13, 2009.
19           (Whereupon Shoemaker Exhibit 102
20           was marked for identification and
21           attached hereto.)
22           MR. EVEN:  It's APL-APPSTORE_01964696-707.
```

39. PAGE 125:02 TO 125:15 (RUNNING 00:00:44.859)

```
02       Q   Do you recall writing this document titled,
03    "My iPhone Developer Experience"?
04       A   Barely.  Vaguely.  Yes.
05       Q   Let me take a step back.  Did you write
06    this document; right?
07       A   Yes, I did.  Yes, I did.
08       Q   And you wrote it as part of your general
09    ordinary course of duties at Apple?
10       A   Yes.  I started on March 9th, 2009.  This
11    was four days later.  I was asked by Ron to write up
12    my developer experience working with the App Store
13    because -- because that's part of the reason they
14    hired me is what did I go through to get onto the
```

```
    15    App Store.
```

40. PAGE 126:20 TO 126:23 (RUNNING 00:00:11.750)

```
    20          Q    How often did you hear developers
    21    complaining about Apple's criteria being unclear
    22    while you were at Apple?
    23          A    Every day probably.
```

41. PAGE 133:20 TO 134:19 (RUNNING 00:01:23.257)

```
    20          Q    You mentioned earlier that you believed
    21    that in your later years at Apple, the accuracy of
    22    the review or the error rate went down.
    23              Do you remember that?
    24          A    Yes, I do.
    25          Q    And do you recall quoting to your
00134:01    executives numbers around the 15 percent error rate
    02    around the 2015-16 time frame?
    03          A    Yes, I do.
    04          Q    And you mentioned earlier that you reviewed
    05    about, I think you said, 100,000 apps a week; is
    06    that right?
    07          A    Yes.
    08          Q    So that would still mean about 15,000
    09    mistakes each week; correct?
    10          A    That is correct.
    11          Q    If you turn to Exhibit 104.
    12              (Whereupon Shoemaker Exhibit 104
    13              was marked for identification and
    14              attached hereto.)
    15    BY MR. EVEN:
    16          Q    That is an e-mail exchange, dated
    17    January 4, 2006.  The top e-mail -- the last e-mail
    18    is from you.  And it bears Bates
    19    APL-APPSTORE_00058136-1838.
```

42. PAGE 135:01 TO 138:03 (RUNNING 00:03:36.626)

```
00135:01          Q    Is this an e-mail that you wrote around
    02    early 2016?
    03          A    It looks to be.
    04          Q    And it's an e-mail that you wrote as part
    05    of your ongoing business and employment at Apple; is
    06    that right?
    07          A    Yes, that's correct.
    08          Q    And you are forwarding an e-mail from a
    09    Mr. Sasser to Mr. Schiller, dated the same day,
    10    January 4th, 2016.
    11              Do you see that?
    12          A    I do see that.
    13          Q    Who is Mr. Sasser?
    14          A    I don't recall.  A developer from Panic.
    15    Panic was a popular developer or a developer that
    16    had popular apps on the store.
    17          Q    Okay.
    18              And they had apps for both iOS and Mac; is
    19    that right?
    20          A    I believe so.  Yes.
    21          Q    And the review process applied both to the
    22    Mac Store and the iOS Store; is that right?
    23          A    Yes.  My team reviewed apps for the Watch,
    24    for the App Store and for the Mac Store, that's
    25    correct.
00136:01          Q    If you turn to the second page of the
    02    document, at the bottom do you see that Mr. Sasser
    03    is saying that -- and this is underlined (as read
    04    and/or reflected:)
```

```
05                The app store takes parts --
06           sorry -- of our job that we're
07           already extremely good at -- like
08           customer support, quick updates,
09           easy refunds -- and makes them all
10           more stressful and difficult, in
11           exchange for giving Apple
12           30 percent of our revenue.
13           Do you see that?
14      A    Yes, I do.
15      Q    What's your understanding as to how the App
16  Store made customer support more difficult for a
17  developer like Panic?
18      A    Well, if you look at the way the App Store
19  works, technically Panic doesn't have any users.
20  Apple has users.  Right.  Apple has customers.
21           And those customers are able to purchase
22  access to an app like Panic, but Panic doesn't get
23  to know who they are.  They don't know their name.
24  They don't have the credit card billing details.
25  They don't know really anything about them.
```
`00137:01`
```
01                So it's a level of indirection.  And it's
02  very difficult for a company like Panic to know, you
03  know, if I write to Panic directly, say I bought
04  your app, they can basically say, prove it.  I don't
05  have any record of you buying my app.
06                They have to go through the Apple channel
07  to make that happen.  It's very difficult to connect
08  the dots once you're running into customer
09  service-related issues.
10      Q    Okay.
11                And if somebody wants to give a 1 star
12  rating to Panic, can Panic do anything about it,
13  talk directly to the customer, explain to them what
14  they're not understanding about the app or anything
15  like that?
16      A    No, not directly.
17      Q    How does the App Store make easy refunds
18  more difficult for developers?
19      A    Well, giving a refund from Apple is real
20  easy.  You just go up to the app -- you just request
21  a refund through a standard channel with Apple Care.
22                The problem is that the developer doesn't
23  really know about it.  Right.  I mean, if somebody
24  requests -- if they go directly to Panic, in this
25  instance, and say, I want a refund, Panic can't do
```
`00138:01`
```
01  it.  They say you have to go to Apple to get the
02  refund.  And so they can get a refund from Apple.
03                But it's another level of indirection.
```

43. PAGE 138:04 TO 138:07 (RUNNING 00:00:10.190)

```
04                But I think -- I'm not sure what he means
05  by that because honestly I've never had problems
06  with getting a refund out of Apple on the App Store,
07  but it's difficult for them to know.
```

44. PAGE 138:18 TO 138:21 (RUNNING 00:00:08.049)

```
18      Q    And fair to say that this created another
19  level of friction between developers and their
20  users?
21      A    Yeah, I would say so.
```

45. PAGE 144:10 TO 144:23 (RUNNING 00:00:46.869)

```
10      Q    Did Apple have a policy against the
11  disclosure to consumers of the 30 percent commission
```

```
12    that developers were paying?
13         A    I never saw anything in writing in the
14    guidelines, but, yes, that is an accurate statement.
15    We did not like to see that in the marketing text.
16         Q    And when you say did not like to see it,
17    that means that an app could get rejected for
18    putting something like that in the marketing text or
19    in an app itself?
20         A    Yes.  If an app were to say the monthly
21    subscription is 6.99, that's an extra 30 percent
22    because of Apple or something like that, yes.  We
23    would absolutely have them remove that.
```

46. PAGE 149:12 TO 149:14 (RUNNING 00:00:12.811)

```
12         Q    Have you ever heard anybody voice concerns
13    about the security of other in-app purchase APIs?
14         A    I have not.
```

47. PAGE 149:15 TO 150:05 (RUNNING 00:00:52.440)

```
15         Q    Based on your understanding, is IAP, in
16    fact, safer than, for instance, PayPal?
17         A    I believe it is, but I don't have any data
18    to back that up.  It just feels like it would be
19    more secure.
20         Q    And why do you think it feels more secure?
21         A    Because when you use in-app purchase,
22    you're using services that are built in on the phone
23    versus a third-party library that may or may not
24    have malware in it.  Right.
25              People can use infected libraries to give
00150:01  you third-party functionality.  And then your
02    password and user name are out there.
03              Whereas, I know if it's using the built-in
04    services of the iPhone, people can't be tracking
05    that information.  They can't be capturing it.
```

48. PAGE 150:22 TO 151:06 (RUNNING 00:00:33.090)

```
22         Q    Has the functionality of IAP involved
23    during your time at Apple in any material way?
24         A    It evolved in a variety of ways, including
25    things like extra protections in place so people
00151:01  could not make accidental purchases.  Right.  Or
02    their children making accidental purposes so -- or
03    purchases.
04              Requiring the password to be reentered
05    after 15 minutes.  Certain features like that
06    changed over time.
```

49. PAGE 151:09 TO 151:18 (RUNNING 00:00:30.470)

```
09         Q    You mentioned earlier that there came a
10    time when you and maybe others thought that maybe 30
11    percent was too high.
12              Do you remember that?
13         A    I do remember that.
14         Q    When was that discussion?
15         A    I would probably say late in my time at
16    Apple, 2015, 2016, developers were complaining about
17    the 30 percent.  I started hearing more and more
18    complaint about it.
```

50. PAGE 171:14 TO 173:21 (RUNNING 00:02:25.040)

```
14         Q    We talked earlier about a store within a
15    store.
16              Do you remember that?
17         A    Yes, I do.
```

```
18        Q    And you said that Apple had a general
19   policy not allowing that; right?
20        A    That's correct.
21        Q    And that was for some time in a more
22   internal policy that became more explicit and public
23   facing over time; is that fair?
24        A    That is correct.
25        Q    And do you -- what's your understanding of
00172:01   the rationale for the prohibition on a store within
02   a store?
03        A    Apple always believed in -- well, there
04   were multiple rationales.  One is that App Store was
05   to be the only way that you could install apps
06   into -- onto the iPhone.  Right.
07             And there was technological reasons for it.
08   There was privacy reasons, et cetera, but the only
09   way to get an app onto your phone was through the
10   App Store.
11             So that was issue No. 1.  Right.  We didn't
12   want anyone else to pretend that they were
13   downloading an app, et cetera.  And we didn't want
14   them to use other things like the enterprise
15   guidelines or enterprise certificates and
16   side-loading certificates.  They could only do it
17   through this one.
18             The other one was a little different.  It
19   was about meritocracy.
20             So the idea for the App Store has always
21   been that the best apps will rise to the top because
22   of reviews, ratings, and downloads.  Right.  The
23   apps that tend to get a lot of downloads, they'll
24   chart; right.
25             And if they are getting a lot of downloads,
00173:01   it's trending.  It means it's got some value.  And
02   those will rise up the charts because people, you
03   know, especially now when there's 2 million apps in
04   the store, it's very difficult to find apps.
05             And so you know what the hot ones are by
06   watching the charts and things that rise in the
07   charts.
08             Now, when you have a store in a store or
09   these app recommendation apps, you have third
10   parties meddling with that and people can pay to
11   place.
12             So let's say I go to one of these app
13   recommendation apps and I say I'll give you $10,000
14   put me at the top of your list, they'll put you at
15   the top of their list and suddenly that terrible app
16   is trending.
17             And that app is changing the Apple charts
18   and people are downloading this piece of garbage
19   over and over and over.
20             That was kind of the reason.  Those are the
21   two reasons that I recall.
```

51. PAGE 175:04 TO 175:13 (RUNNING 00:00:27.216)

```
04             Let me introduce Exhibit 111.  That's an
05   e-mail chain, Bates stamped APL-APPSTORE_09425339.
06             (Whereupon Shoemaker Exhibit 111
07             was marked for identification and
08             attached hereto.)
09   BY MR. EVEN:
10        Q    That's another e-mail chain you wrote in
11   the ordinary course as part of your job at Apple;
12   right?
13        A    Yes, it is.
```

52. PAGE 175:14 TO 175:16 (RUNNING 00:00:08.003)

```
14          Q   And you're given here ERB meeting notes.
15              Do you see that?
16          A   Yes, I do.
```

53. PAGE 175:17 TO 176:07 (RUNNING 00:00:36.129)

```
17          Q   And do you see at the top of the second
18      page there's an app name called The Web Store,
19      discover the top fun and useful or whatever from
20      developer Orange?
21              Do you see that?
22          A   Yes, I do.
23          Q   And you say it's rejected.  And in the
24      comment you say (as read and/or reflected:)
25                  We do not want apps that
00176:01            replace our store with web apps.
02              Do you see that?
03          A   Yes, I do.
04          Q   What was the rationale for not wanting a
05      web app store?
06          A   I think the comments sum that up.  They
07      don't want to replace the store with web apps.
```

54. PAGE 180:22 TO 181:03 (RUNNING 00:00:28.489)

```
22          Q   So while this is updating, let me introduce
23      Exhibit 113.  That's a document dated November 23,
24      2011.
25          A   Okay.
00181:01        Q   Again, an e-mail chain and it's
02      APL-APPSTORE_05267651.
03              If you can take a look at that.
```

55. PAGE 181:04 TO 181:12 (RUNNING 00:00:11.455)

```
04          A   Okay.  I see it.
05              (Whereupon Shoemaker Exhibit 113
06              was marked for identification and
07              attached hereto.)
08      BY MR. EVEN:
09          Q   This is another e-mail that you wrote and
10      received as part of your ordinary course of
11      employment at Apple; right?
12          A   Yes, it is.
```

56. PAGE 181:13 TO 181:23 (RUNNING 00:00:17.800)

```
13          Q   And on the second page, the very first
14      e-mail in the chain, you're saying, (as read and/or
15      reflected:)
16                  I'm removing the Big Fish
17              games app immediately.  I have no
18              guideline to remove their app, but
19              have been asked by the ERB to hide
20              it.  I will be doing so
21              immediately.
22              Do you see that?
23          A   Yes, I do.
```

57. PAGE 181:24 TO 182:01 (RUNNING 00:00:07.250)

```
24          Q   What do you mean by "hide it"?
25          A   It means remove it.  Just remove it from
00182:01    the App Store so nobody can see it.
```

58. PAGE 182:23 TO 183:09 (RUNNING 00:00:32.380)

```
23              What do you mean by (as read and/or
24      reflected:)
```

37

```
      25                    I have no guideline to remove
00183:01          their app On.
      02      A    I don't recall.
      03      Q    Doesn't it mean that there is no guideline
      04   that actually supports the ERB's decision that you
      05   can point to and say to the developer, here's the
      06   problem?
      07      A    That's how it reads, but it's 2011.  I
      08   figured there were guidelines at the time that
      09   disallowed this.  Maybe not.  I don't recall.
```

59. PAGE 184:07 TO 184:11 (RUNNING 00:00:17.311)

```
      07      Q    So let's turn to Exhibit 114.  Let me
      08   introduce it.
      09                    That's a November 23, which is the same
      10   date, November 23, 2011, and it's e-mails from you.
      11   This is APL-APPSTORE_05267654.
```

60. PAGE 184:12 TO 184:18 (RUNNING 00:00:05.409)

```
      12                    (Whereupon Shoemaker Exhibit 114
      13                    was marked for identification and
      14                    attached hereto.)
      15   BY MR. EVEN:
      16      Q    That's another e-mail that you wrote in the
      17   ordinary course of your employment at Apple; right?
      18      A    Yes.
```

61. PAGE 184:19 TO 185:20 (RUNNING 00:00:53.936)

```
      19      Q    And it's a little more lively in its
      20   language?
      21      A    Yes, it is.
      22      Q    And Mr. Neumayr -- I hope I'm not
      23   butchering his name -- says (as read and/or
      24   reflected:)
      25                    If we clearly said to them "we
00185:01                   removed it because we do not allow
      02                   app stores in an app inside the App
      03                   Store."
      04                   Which is a quote from your e-mail that
      05   we've just seen.
      06      A    Yeah.
      07      Q    (As read and/or reflected:)
      08                    Why wouldn't we also say this
      09                   publicly as a statement?
      10                   Do you see that?
      11      A    Yes, I do.
      12      Q    And you respond (as read and/or reflected:)
      13                    Because it's chicken shit.  We
      14                   don't have a guideline for this.
      15                   Do you see that?
      16      A    Yes, I do.
      17      Q    Fair to say that at the time you thought
      18   that there was no guideline that supported this
      19   decision?
      20      A    I -- yes.  I would trust what I said then
```

62. PAGE 185:21 TO 185:22 (RUNNING 00:00:05.130)

```
      21   about the guidelines then than I would now.  I don't
      22   remember those guidelines.
```

63. PAGE 185:24 TO 185:24 (RUNNING 00:00:01.497)

```
      24                    So if we turn to 115.
```

64. PAGE 185:25 TO 186:15 (RUNNING 00:00:58.977)

```
        25   ///
 00186:01            (Whereupon Shoemaker Exhibit 115
        02            was marked for identification and
        03            attached hereto.)
        04            THE WITNESS:  Okay.
        05   BY MR. EVEN:
        06        Q   Now we're jumping two years forward.  So
        07   this is a February 5, 2013 e-mail.
        08   APL-APPSTORE_07087422-4224.
        09            That's another e-mail exchange that you had
        10   as part of your ordinary course of employment at
        11   Apple; is that right?
        12        A   Yes, it is.
        13        Q   And this is, again, concerning Big Fish; is
        14   that right?
        15        A   Yes.
```

65. PAGE 186:24 TO 187:04 (RUNNING 00:00:13.814)

```
        24        Q   And that's about some other iOS application
        25   that Big Fish submitted; correct?
 00187:01        A   That is correct.
        02        Q   Not the one that was removed back in 2011;
        03   right?
        04        A   That's correct.  Yes.
```

66. PAGE 188:10 TO 188:25 (RUNNING 00:00:33.098)

```
        10        Q   Going all the way to the top, you write
        11   again (as read and/or reflected:)
        12               Big Fish Unlimited is seen as
        13            a game store within an app.  This
        14            is not allowed.  Phil and Eddy have
        15            been adamant about this, despite my
        16            protests.  We have no clear
        17            guidelines around this.
        18            Do you see this?
        19        A   Yes, I do.
        20        Q   And this is now February 2013 and still
        21   there are no guidelines; correct?
        22        A   So it appears, yes.
        23        Q   And Phil and Eddy are Phil Schiller and
        24   Eddy Cue; correct?
        25        A   Yes, that is correct.
```

67. PAGE 189:07 TO 189:11 (RUNNING 00:00:14.280)

```
        07        Q   And so as of February 2013, you thought
        08   that a game subscription is a promising business
        09   model that should be allowed?
        10        A   Personal belief, probably -- yes, that is
        11   correct.
```

68. PAGE 195:09 TO 195:11 (RUNNING 00:00:00.031)

```
        09            (Whereupon Shoemaker Exhibit 116
        10            was marked for identification and
        11            attached hereto.)
```

69. PAGE 195:16 TO 195:22 (RUNNING 00:00:18.916)

```
        16        Q   This is an e-mail dated July 18, 2011.
        17            Is this another e-mail that you wrote
        18   during your employment at Apple?
        19        A   I believe so.  Yes, it looks like it.
        20        Q   And it was part of the ordinary course of
        21   fulfilling of your duties at Apple?
        22        A   Yes.
```

70. PAGE 196:10 TO 196:25 (RUNNING 00:00:33.925)

```
10        Q    And Ms. Doerr writes in the second sentence
11   (as read and/or reflected:)
12               The system is not perfect and
13             scams can still perpetuate in the
14             App Store where reviews can be
15             gamed in short term and even
16             possibly long-term monetary gains
17             can be made by unscrupulous
18             developments.
19             Do you see that?
20        A    Yes, I do.
21        Q    Do you agree that that's a correct
22   statement?  The system was never perfect and scams
23   did still perpetuate the App Store from time to
24   time?
25        A    Sure.  Yes.
```

71. PAGE 204:02 TO 204:10 (RUNNING 00:00:26.803)

```
02             Was there anything about the App Review
03   process that was not susceptible to replication by
04   another App Store should another App Store decide to
05   do it?
06        A    No, I don't think so.
07        Q    It was just a matter of investing the money
08   and taking the time and thinking about the problem
09   and addressing it?
10        A    That's right.
```

72. PAGE 214:23 TO 215:02 (RUNNING 00:00:17.520)

```
23        Q    Would you agree with me that there were
24   instances that malware got onto iPhones?
25        A    Yes, I agree with that.
00215:01   Q    And malware got onto the App Store?
02        A    Yes.
```

73. PAGE 216:03 TO 216:14 (RUNNING 00:00:41.402)

```
03        Q    Do you recall an instance where a foreign
04   government had managed to put some malware into the
05   App Store?
06        A    Yes, I do.
07        Q    What was that instance?
08        A    A researcher from a university in China
09   submitted an app that when you played the game, it
10   would randomly go into your contact list and replace
11   all the phone numbers with 8s.  8888888.
12             And Chinese government brought that to our
13   attention to say -- to criticize us for our review
14   process.
```

74. PAGE 229:20 TO 229:23 (RUNNING 00:00:22.715)

```
20             MR. EVEN:  If you turn to Exhibit 119.
21        Q    And scroll to page 367.  This document is
22   even bigger than the Wiki, I believe.
23        A    Yeah.  Yeah, it is.
```

75. PAGE 230:03 TO 231:03 (RUNNING 00:01:14.277)

```
03        Q    At the top of the page, there's a paragraph
04   starting with (as read and/or reflected:)
05             Subcommittee staff learned
06             that Apple has engaged in conduct
07             to exclude rivals ...
08             Do you see that?
09        A    Yes, I do.
```

40

```
10      Q    And do you see that it says (as read and/or
11   reflected:)
12              For example, Mr. Shoemaker
13           explained that Apple's senior
14           executives would find pretextual
15           reasons to remove apps from the App
16           Store, particularly when those apps
17           competed with Apple services.
18      A    Yes, I do.
19      Q    Do you recall sharing those views with the
20   staffers?
21      A    Not in so many words, but I had a lot of
22   conversations with them.  I -- I do recall saying
23   that -- yes.  I guess, yes, I did have that
24   conversation with them.
25      Q    And we saw some examples of instances like
00231:01   that today about Google Voice and some of the Big
02   Fish situation and things like that; is that fair?
03      A    Yes.
```

76. PAGE 248:13 TO 251:04 (RUNNING 00:03:16.905)

```
13   are listening, what is the difference between a web
14   app and an iOS app for the App Store?
15      A    So an iOS app is an application that has
16   been written in a specific programming language like
17   Objective-C and Swift.
18              And you write it on a Mac -- on a Mac or
19   other type of computer.  And you access specific
20   APIs to do the functionality that you want.
21              You want to put buttons on the screen.  You
22   do that with Objective-C or Swift.
23              If you want to get access to the contacts
24   or access to any of the deeper functionality in iOS,
25   you use an app for that.
00249:01              Now -- I'm sorry.  You use an API for that
02   to access it within your app.
03              So you can have a lot of functionality,
04   full integration with the hardware device, access to
05   the camera, access to the screen, drawing pixels on
06   the screen, creating games, et cetera.  And it's a
07   full, robust type of development environment on
08   which you develop.  And that's available on iOS.
09              When you go to the web and you do a web
10   app, you're creating what's called "lowest common
11   denominator functionality."  You're now creating an
12   app -- an app with HTML and JavaScript.
13              So, first of all, you have much slower
14   processing.  It's a slower app because it's the same
15   stuff you see on a website.  It's the HTML and
16   JavaScript.  So you have limited functionality where
17   you can put a pixel on the screen.  It's not as
18   powerful.
19              You don't have access to all of those APIs
20   built into the underlying operating system because
21   your lowest common denominator.  You want it to run
22   on iOS.  You want it to run on windows.  You want it
23   to run on Mac, and you want it to run on Android.
24   So suddenly you're eliminating a lot of
25   functionality for that.
00250:01              Now, these operating systems can expose a
02   little stuff that can be -- expose some of these
03   deeper APIs to be used by web apps, but doing so
04   also opens up security problems, a way, a back door
05   into getting to the code.
06              You want to expose as little as you can to
07   these web apps because web apps don't go through a
```

41

```
08     review process.  Websites don't go through a review
09     process.
10             If you launch a website and it can access
11     underlying functionality like maybe your contacts,
12     suddenly every website you go to has the potential
13     of stealing your information.  Stealing your data.
14     And that's something that we want to disallow.
15             So a web app essentially is a website that
16     you say make a web app version of this.  And all
17     that does is it takes all of these files, these
18     HTML, these JavaScript files, and puts it into a
19     small container, and it lives on the springboard, on
20     the home screen, if you will, of your iOS device.
21             It looks like an app.  It's an icon.  But
22     it's a web app.  You're not going to have a lot of
23     functionality there.  You click it.  It's just like
24     saving a Safari link on your desktop and launching
25     an app.  So there's a lot of limited functionality.
00251:01   You can't do as much there.
02         Q   So at bottom, would you say that a web app
03     is no substitute for a true iOS app?
04         A   Yes, I would.
```

42

Shoemaker, Phillip (Vol. 02) - January 14, 2021   1 CLIP (RUNNING 00:11:37.692)

---

20 SEGMENTS (RUNNING 00:11:37.692)

---

1. PAGE 356:05 TO 356:13 (RUNNING 00:00:13.228)

```
05           THE REPORTER:  Raise your right hand,
06    please.
07
08              PHILLIP BURTON SHOEMAKER,
09    recalled as a witness by counsel for Plaintiff, being
10    first duly sworn, testified as follows:
11
12           THE WITNESS:  Yes, I do.
13           THE REPORTER:  Thank you.
```

2. PAGE 452:09 TO 452:15 (RUNNING 00:00:24.733)

```
09           And this is Bates Stamp 04 -- 00424815.
10    Exhibit 176.  It is an e-mail from you,
11    Mr. Shoemaker, to Peter stone.  It is dated
12    March 6th, 2013.  New app process.
13           Is this an e-mail that you would have sent
14    in the course of your employment at Apple?
15       A.  Yes.
```

3. PAGE 452:19 TO 452:25 (RUNNING 00:00:24.269)

```
19       Q.  And this is a discussion about whether the
20    apps were reviewed for viruses.
21           And according to this e-mail, the apps are
22    reviewed for -- are reviewed -- are scanned -- I'm
23    sorry.  Are scanned with the Norton iAntivirus and
24    the ClamXAV; is that correct?
25       A.  That is correct.
```

4. PAGE 453:17 TO 454:04 (RUNNING 00:00:34.895)

```
17       Q.  Okay.  And do you know how iTunes scanned
18    for viruses, other than through the Norton and the
19    ClamXAV?
20       A.  No.  I did not.
21       Q.  So do you know if they did a scan for the
22    .exes?
23       A.  Yes.
24           Before I left, I know they were scanning the
25    binaries for anything inside of the .zip file, which
00454:01    is also an app.  They would scan those.  Whether they
02    had .exes or .dlls in there, they would scan them for
03    viruses -- well-known viruses using tools like Norton
04    antivirus.
```

5. PAGE 480:07 TO 480:15 (RUNNING 00:00:31.532)

```
07           So yesterday you mentioned an instance where
08    Apple rejected an app and then released a similar
09    feature on a tone.
10           Do you recall that?
11       A.  Yes.
12       Q.  And what was the feature in question?
13       A.  It was wireless syncing of -- of data.
14       Q.  Wireless syncing between which devices?
15       A.  iPhone and your Mac.
```

6. PAGE 484:20 TO 485:17 (RUNNING 00:01:40.097)

```
        20          Q.   You mentioned yesterday that there were
        21      generally no viruses on iOS; is that correct?
        22          A.   That is correct.
        23          Q.   And I think you have stated that that is
        24      because unlike Windows and, to some extent, Mac OS,
        25      iOS is a more modern OS; is that right?
00485:01          A.   Yes.   That is correct.
        02          Q.   And I think you said that -- one aspect that
        03      is relevant to the issue of susceptibility to viruses
        04      was that iOS has what you called a sandbox model; is
        05      that right?
        06          A.   Yes.   That is correct.
        07          Q.   And sandbox model, if I understand
        08      correctly, it that essentially each application
        09      remains in its own little compartment and can't reach
        10      out of that unless the user or app allows it; is that
        11      right?
        12          A.   Yes.   That is correct.
        13          Q.   And if I understand in your answers then
        14      when it comes to malware, iPhones are -- are, you
        15      know, super safe because iOS in the sandbox model are
        16      very robust.
        17          A.   That is correct.
```

7. PAGE 487:06 TO 487:11 (RUNNING 00:00:24.101)

```
        06              And so what you are telling me is that for
        07      viruses, sandbox -- a sandbox model is very effective
        08      and human review is not.   And for malware, really,
        09      neither one is very effective because it is just very
        10      hard to catch.   It is just a real problem.
        11          A.   I would agree with that.
```

8. PAGE 488:02 TO 488:11 (RUNNING 00:00:30.522)

```
        02          Q.   Now, Apple does allow other app stores on
        03      Mac OS; is that right?
        04          A.   Yes, they do.
        05          Q.   And Apple does allow direct download of
        06      applications, what is called siloing onto Mac
        07      computer; right?
        08          A.   Yes, they do.
        09          Q.   And an iOS, even though it is more secure,
        10      Apple does not allow app stores for siloing; right?
        11          A.   That is correct.
```

9. PAGE 488:12 TO 488:16 (RUNNING 00:00:27.722)

```
        12          Q.   So would you agree with me that to extend --
        13      to the extent anyone claims that Apple needs a close
        14      guard on iOS to prevent viruses, for instance, that
        15      is just not true?
        16          A.   For viruses, yes.   That is correct.
```

10. PAGE 490:13 TO 490:19 (RUNNING 00:00:25.029)

```
        13          Q.   You mentioned yesterday that there were some
        14      dumb decisions made by some reviewers who put certain
        15      apps on halt.
        16              Do you recall that?
        17          A.   Yes, I do.
        18          Q.   And that was with respect to apps that
        19      supported a competing watch; right?
```

11. PAGE 490:20 TO 491:07 (RUNNING 00:00:42.115)

```
        20          A.   Yes.
        21          Q.   And so we covered yesterday that competing
```

```
22   apps sometimes faced issues at the ERB because of
23   positions taken by your superiors; is that right?
24         A.   Yes.
25         Q.   And based on the story of this competing
00491:01   watch, I understand that competing apps also
02   sometimes faced problems with the review process
03   because of your -- of your underlings, the people who
04   reported to you.
05            Is that fair?
06         A.   Yes.  Overzealous reviewers, yes.  That is
07   correct.
```

12. PAGE 491:11 TO 491:21 (RUNNING 00:00:26.310)

```
11            They are they are overzealous in protecting
12   Apple; right?
13         A.   I would say they are more overzealous in
14   protecting themselves and their job.  They were
15   afraid they would get fired if they did something
16   incorrect.
17         Q.   Okay.  And they thought that they might get
18   fired because they thought that Apple would not want
19   to approve things that are competing against Apple;
20   is that right?
21         A.   That is my understanding, yes.
```

13. PAGE 510:01 TO 510:12 (RUNNING 00:00:32.890)

```
00510:01         Q.   Okay.  And would a jail broken iPhone still
02   have sandboxing as part of its iOS?
03         A.   No.  It would not.
04         Q.   Okay.  So again, you had spoken earlier with
05   Mr. Even about how sandboxing was the be all/end all
06   safeguard against viruses.
07            But would that safeguard exist in jail
08   broken iPhones?
09         A.   It would not, no.
10         Q.   And how seriously did Apple, during your
11   time there, take the threat of jail breaking?
12         A.   Very seriously.
```

14. PAGE 517:21 TO 518:15 (RUNNING 00:01:02.276)

```
21         Q.   And did Apple or the App Store review
22   process ever make changes or modifications in
23   response to developer feedback?
24         A.   Yes.
25         Q.   And how frequently did that occur?
00518:01         A.   A lot of things changed based on feedback.
02   As far as the process was concerned, we were
03   continually refining the process based on feedback.
04   The guidelines were -- were one of the clearest forms
05   of -- of feedback causing changes at Apple.  When
06   developers would complain about one of our
07   guidelines, the executives, the ERB, we would all get
08   together and discuss those guidelines and ultimately
09   make changes to them if we found they were warranted
10   or not if we didn't, and we would release those
11   guidelines -- updated versions of those guidelines;
12   so that -- that happened -- those guidelines changed
13   probably twice a year, but that was -- that was just
14   one of the ways in which we would -- we would change
15   based on feedback.
```

15. PAGE 551:12 TO 552:10 (RUNNING 00:01:04.607)

```
12         Q.   Going back to the question, Mr. Shoemaker.
13            Why were you concerned that there would be
14   an exodus of developers from iOS to Android?
```

```
15        A.   The -- the Apple App Store was -- was built
16   for our customers, our consumers, the people
17   downloading apps.  And we never had -- you know, we
18   never had consumers complaining about -- about the
19   app review process; right?
20        Consumers never did that.  That was
21   developers.
22        But -- but my concern was if we didn't
23   improve the app review process, developers might
24   start pulling out and then making their games or
25   their apps only available on the -- the Android
00552:01   store.  It was just a -- to me, it was always -- you
02   know, it was always the concern.  You always want to
03   strive to be better than you were the day before.
04   And so, for me, I was always concerned about that,
05   and I didn't want to be the reason why something like
06   that happened.
07        Q.  And did developers ever threaten to take
08   their apps off of iOS and move exclusively to
09   Android?
10        A.  Yes.
```

16. PAGE 555:02 TO 555:13 (RUNNING 00:00:27.350)

```
02        Q.  Okay.  And speaking of it being heated,
03   I note that on the bottom of this e-mail on page
04   there he concludes by saying:
05        "If Apple keeps treating developers that
06        way, all of the small and medium developers
07        will run away to other platforms.  The
08        developers are the future of Apple."
09        Is this a complaint that you heard -- or
10   a threat, I should say, that you heard from other
11   developers?
12        A.  Yes.  We -- we -- I had heard this threat
13   before.
```

17. PAGE 562:14 TO 562:19 (RUNNING 00:00:09.507)

```
14        MS. AHMAD:  Nineteen, yes.
15        MR. PHILLIPS:  Okay.
16        (Defense Exhibit Number DX-19
17        was marked for identification.)
18   BY MS. AHMAD:
19        Q.  Mr. Shoemaker, will you pull up Exhibit 19?
```

18. PAGE 562:21 TO 563:08 (RUNNING 00:00:45.486)

```
21        Q.  So this is an e-mail exchange between you,
22   P.B. Shoemaker direct, and Zenus Song at Apple.
23        Is this an exchange that you had in the
24   regular course of your work for Apple?
25        A.  Okay.  Yes, it is.
00563:01   Q.  And who are you writing to when you address
02   it team and send it to P.B. Shoemaker direct?
03        A.   So those were my direct reports; so my
04   managers in my organization.
05        Q.  All right.  And I wanted to -- well, take
06   a look at the e-mail and tell me if you recall
07   generally the subject matter that you recount here.
08        A.  Yes.  I do -- I do recall this.
```

19. PAGE 565:07 TO 565:10 (RUNNING 00:00:10.008)

```
07        Q.  Well, what was your understanding from these
08   conversations with Android users as to why they had
09   more concerns on Android than they would have had on
10   an iOS?
```

46

20. **PAGE 565:13 TO 565:25 (RUNNING 00:00:41.015)**

```
13            THE WITNESS:  Because the users -- I'm
14    sorry.  Because -- because Android didn't -- I'm
15    sorry.  Google did no checks.  If you submit an app
16    to the -- the store, it basically made it onto the
17    store after going through some of the automation
18    stuff, but malware and privacy apps would get in
19    pretty easily -- private -- I'm sorry.  When I say
20    privacy, I mean apps that can affect your privacy,
21    that would take information, et cetera, would often
22    make it into the store.  There are hundreds of news
23    articles about those kinds of apps.  And we felt our
24    users felt it was much more comfortable doing that on
25    the App Store.
```
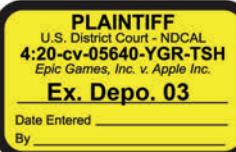
<u>*Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640-YGR-TSH (N.D. Cal.)</u>

Deposition Designation of Eddy Cue
(February 8, 2021)

Time

Epic Games, Inc.'s Designations (Blue Highlight)	Apple Inc.'s Designations (Yellow Highlight)
33 minutes 13 seconds	1 minute 40 seconds

<u>Cue, Eddy (Vol. 01) - February 8, 2021</u>   1 CLIP (RUNNING 00:34:52.201)

94 SEGMENTS (RUNNING 00:34:52.201)

1. PAGE 24:12 TO 24:14 (RUNNING 00:00:07.380)

```
12          Q   Mr. Cue, what's your job title at present?
13          A   I'm the senior vice president of Internet
14    services and software at Apple.
```

2. PAGE 25:13 TO 25:19 (RUNNING 00:00:33.399)

```
13              What are your job responsibilities at
14    present?
15          A   I manage a lot of Apple services, examples
16    being Maps, iCloud, along with our media, which is
17    Apple TV+, Apple Music.  I manage an engineering
18    team for Apple Arcade.  I manage Apple Pay, Apple
19    Card.
```

3. PAGE 26:12 TO 27:17 (RUNNING 00:01:39.583)

```
12              Have you had any job responsibilities that
13    related to the App Store at all since you became
14    vice president of Internet services in approximately
15    the mid 2005ish time frame?
16          A   I did.
17          Q   And what were those responsibilities at
18    that time?
19              So we're going back now approximately to
20    sort of around 2005, 2007, in that time.
21          A   Yeah.
22              Well, let's just start from the beginning
23    of the App Store, which is roughly around that time.
24    I don't know the exact dates, but when the App Store
25    was started, my team did the engineering work of
00027:01    creating the App Store, the back-end parts of the
02    App Store.
03              And then we also were programming the App
04    Store.  What I mean by "programming" is which apps
05    were featured when you opened certain pages.
06              And those were my two primary
07    responsibilities.
08          Q   Did those responsibilities for the App
09    Store change at all over time?
10          A   They have.
11          Q   And in what ways have they changed?
12          A   The responsibility for managing the
13    features and what I would call running the store on
14    a day-to-day basis are managed by Phil Schiller.
15              I still manage all of the engineering
16    components, meaning the engineers that do the work
17    for creating it and maintaining it.
```

4. PAGE 45:11 TO 45:14 (RUNNING 00:00:06.240)

```
11          Q   And one of the things that makes the iPhone
12    attractive to users is a robust set of apps.
13              Would you agree with that?
14          A   I do.
```

49

5. PAGE 47:15 TO 47:19 (RUNNING 00:00:08.456)

```
15        Q   At the time that the iPhone was launched,
16    there weren't native apps that were being written
17    for the iPhone by third-party developers; is that
18    right?
19        A   That's correct.
```

6. PAGE 61:25 TO 62:01 (RUNNING 00:00:03.605)

```
      25        Q   Would Android -- do Android apps work on
00062:01    the iOS platform?
```

7. PAGE 62:03 TO 62:05 (RUNNING 00:00:06.220)

```
03           THE WITNESS:  Again, Android is something
04    completely different and wouldn't work.  So I don't
05    understand.
```

8. PAGE 63:05 TO 63:06 (RUNNING 00:00:03.442)

```
05           Is it the case that Android apps do not
06    work on the iOS platform?
```

9. PAGE 63:08 TO 63:09 (RUNNING 00:00:05.606)

```
08           THE WITNESS:  Again, the Android app itself
09    is written to the Android SDK and wouldn't run.
```

10. PAGE 63:10 TO 63:12 (RUNNING 00:00:08.083)

```
10           But many Android app developers build iOS
11    apps using RSDK, and so many of the apps are
12    available on both platforms.
```

11. PAGE 64:03 TO 64:04 (RUNNING 00:00:05.409)

```
03           Let's take a look at PX 403.  PX 403, if
04    the witness has it.
```

12. PAGE 64:07 TO 64:12 (RUNNING 00:00:10.186)

```
07           This is a document, single-page document
08    that is dated 3 January 2010, bearing the Bates
09    number at the bottom -00120802.
10           (Whereupon Cue Exhibit 403 was
11           marked for identification and
12           attached hereto.)
```

13. PAGE 65:13 TO 65:18 (RUNNING 00:00:11.694)

```
13           And do you see that you are a cc on this
14    document?
15        A   I do.
16        Q   And do you believe that you received it on
17    or about 3 January 2010?
18        A   I'm sure I did.
```

14. PAGE 67:13 TO 67:19 (RUNNING 00:00:28.815)

```
13        Q   Let's turn to PX 404, if you have that,
14    Mr. Cue.  I'll identify it for the record.
15           It's a document, two-page document, from
16    Mr. Cue to Mr. Cook and Mr. Schiller, subject:  Back
17    to School next year, bearing the Bates number at the
18    bottom -09114427 through -28, dated 15 February
19    2013.
```

15. PAGE 67:23 TO 67:23 (RUNNING 00:00:01.034)

```
23           THE WITNESS:  I do have that.
```

16. PAGE 68:01 TO 68:02 (RUNNING 00:00:02.315)

```
00068:01            Let me know when you've had an opportunity
     02    to review the document.
```

17. PAGE 68:03 TO 68:13 (RUNNING 00:00:22.384)

```
     03        A   Okay.  I have.
     04        Q   All right.
     05            Do you see that in the first paragraph, you
     06    say (as read and/or reflected:)
     07                Getting customers using our
     08                stores (iTunes, App and iBookstore)
     09                is one of the best things we can do
     10                to get people hooked to the
     11                ecosystem.
     12            Do you see that?
     13        A   I do.
```

18. PAGE 70:15 TO 70:20 (RUNNING 00:00:19.121)

```
     15        Q   And so is it fair to say that part of what
     16    you're saying here is that in order for a consumer
     17    to buy a Samsung, they might have to spend hundreds
     18    of additional dollars in order to have the same
     19    content on a new Samsung device as they already had
     20    on their iPhone?
```

19. PAGE 70:22 TO 70:25 (RUNNING 00:00:08.155)

```
     22            THE WITNESS:  Yes.  In the case of, it's --
     23    if they were buying a Samsung phone, they would have
     24    to buy some of these things again if they wanted to
     25    have the exact same thing there.
```

20. PAGE 79:04 TO 79:06 (RUNNING 00:00:08.867)

```
     04            Now, the App Store, do you believe it's
     05    been financially successful since it was first
     06    introduced?
```

21. PAGE 79:08 TO 79:11 (RUNNING 00:00:04.700)

```
     08            THE WITNESS:  To whom?
     09    BY MS. FORREST:
     10        Q   To Apple.
     11        A   Yes.
```

22. PAGE 84:01 TO 84:09 (RUNNING 00:00:30.836)

```
00084:01            Would you agree with me that there are
     02    different ways in which the App Store has been able
     03    to create revenue streams?
     04            For instance, through subscriptions --
     05        A   Oh --
     06        Q   -- or IAP or ad search, things like that.
     07        A   Yes.  We have come up with different ways
     08    over time to allow developers to charge customers in
     09    different ways.
```

23. PAGE 85:10 TO 85:12 (RUNNING 00:00:08.453)

```
     10        Q   Does Apple obtain revenue through IAP?
     11        A   There is a commission revenue share with
     12    in-app purchase, yes.
```

24. PAGE 85:16 TO 85:17 (RUNNING 00:00:14.330)

```
     16            Does Apple make revenue through the
     17    subscription sales that developers are able to make?
```

25. PAGE 85:19 TO 85:22 (RUNNING 00:00:09.036)

```
    19            THE WITNESS:  In addition to -- in addition
    20    to in-app purchase, developers are able to sell
    21    digital subscriptions in which there is a rev share
    22    of commission as well.
```

26. PAGE 87:23 TO 88:06 (RUNNING 00:00:29.991)

```
    23            When a search -- when a user enters a
    24    search query in the App Store --
    25        A   Yes.
00088:01        Q   -- the first result that is now returned is
    02    a monetized ad; correct?
    03        A   If an ad is available, that's correct.
    04        Q   And Apple obtains revenue from the
    05    monetization of those ads; is that correct?
    06        A   That's correct.
```

27. PAGE 89:01 TO 89:05 (RUNNING 00:00:09.391)

```
00089:01            Would you agree with me that Apple has made
    02    over a billion dollars in revenue from the
    03    monetization from the first search result in the App
    04    Store?
    05        A   I do.
```

28. PAGE 89:13 TO 89:21 (RUNNING 00:00:17.467)

```
    13            So PX 406 is from Mr. Cue to Mr. Schiller,
    14    dated 15th July 2009.  And it bears the Bates number
    15    at the bottom -06216718.
    16            (Whereupon Cue Exhibit 406 was
    17            marked for identification and
    18            attached hereto.)
    19    BY MS. FORREST:
    20        Q   And if you would let me know, Mr. Cue, when
    21    you have had an opportunity to review this document.
```

29. PAGE 89:22 TO 90:07 (RUNNING 00:00:24.138)

```
    22        A   I have.
    23        Q   Okay.
    24            And is this a document that you wrote to
    25    Mr. Schiller on or about the 15th of July 2009?
00090:01        A   It is.
    02        Q   Okay.
    03            And the second e-mail below yours is from
    04    Mr. Schiller to you -- actually to Mark, which I
    05    take it as Mark Donnelly, who is indicated as a cc
    06    on this document?
    07        A   That's correct.
```

30. PAGE 90:09 TO 91:13 (RUNNING 00:00:58.863)

```
    09            And it says (as read and/or reflected:)
    10            Mark, Steve has asked if we
    11            could send him the data for the App
    12            Store financial model.  He wants to
    13            understand the profits and costs
    14            (the assumption is that it is at
    15            best slightly positive given all
    16            the free apps, which is fine).
    17            Thanks, Phil.
    18            Do you see that?
    19        A   I do.
    20        Q   Do you -- to the best of your -- did you
    21    understand the Steve here to be Steve Jobs?
    22        A   That's what I believed.
    23        Q   Okay.
```

```
24              And you respond, quote (as read and/or
25         reflected:)
00091:01            We are definitely making money
   02              so we are fine and Mark can send
   03              you the data.
   04              Is that right?
   05         A    That's correct.
   06         Q    Okay.
   07              And when you said, "We are definitely
   08         making money," what did you mean?
   09         A    Again, we were taking high-level business
   10         models of the amount of revenue coming in versus
   11         some of the costs associated with running the store.
   12         And it wasn't -- it was -- it was not in the red.
   13         It was in the positive.
```

31. PAGE 91:17 TO 91:20 (RUNNING 00:00:17.047)

```
   17              Do you remember a point in time when there
   18         was a debate as to whether or not iMessage should be
   19         opened to Android, and Android users would be able
   20         to utilize iMessage on an Android platform?
```

32. PAGE 91:22 TO 92:09 (RUNNING 00:00:35.118)

```
   22              THE WITNESS:  I remember the time of
   23         wanting to do an iMessage app on Android ourselves
   24         so that you could -- on Android Talk to iMessage.
   25         So we would do the app.
00092:01         BY MS. FORREST:
   02         Q    So that would be Apple writing on the
   03         Android platform an iMessage app?
   04         A    That's correct.
   05         Q    Would there have been -- in that version,
   06         would there have been cross-compatibility with the
   07         iOS platform so that users of both platforms would
   08         have been able to exchange messages with one another
   09         seamlessly?
```

33. PAGE 92:11 TO 92:12 (RUNNING 00:00:04.212)

```
   11              THE WITNESS:  That was certainly the
   12         discussion and the view that I had.
```

34. PAGE 92:13 TO 92:16 (RUNNING 00:00:12.055)

```
   13              That wouldn't be the case over time because
   14         of the features that were added to Messages, but at
   15         that time, I think we could have made a version on
   16         Android that worked with iOS.
```

35. PAGE 92:17 TO 93:01 (RUNNING 00:00:21.741)

```
   17         BY MS. FORREST:
   18         Q    And there were several individuals,
   19         including Mr. Schiller, who disagreed with you; is
   20         that right?
   21         A    That's correct.
   22         Q    And Mr. Schiller's view prevailed; is that
   23         right?
   24         A    Yeah.  I mean, you can say -- I mean,
   25         obviously he didn't think we should do it, and we
00093:01         didn't do it, so you could say he prevailed.  But I
```

36. PAGE 93:02 TO 93:02 (RUNNING 00:00:03.147)

```
   02         don't think he was instrumental in the decision.
```

37. PAGE 96:07 TO 96:21 (RUNNING 00:00:40.051)

```
   07              PX 407 is a document that is dated 8 April
```

```
08    2013, from Mr. Federighi, F-e-d-e-r-i-g-h-i, to
09    Mr. Cue, copying Mr. Schiller and Mr. Cook.  It's a
10    document that bears the Bates numbers -09702122
11    through -23.
12              (Whereupon Cue Exhibit 407 was
13              marked for identification and
14              attached hereto.)
15              MS. FORREST:  Exhibit 408 is a document
16    from Mr. Schiller to Mr. Cue, copying Mr. Federighi
17    and Mr. Cook, dated 8 April 2013, bearing the Bates
18    numbers -09702116 through -118.
19              (Whereupon Cue Exhibit 408 was
20              marked for identification and
21              attached hereto.)
```

38. PAGE 97:08 TO 97:11 (RUNNING 00:00:12.710)

```
08              Do you recognize, first, what's been marked
09    as PX 407, which is the 8 April 2013 document from
10    you to Mr. Federighi -- I'm sorry -- from
11    Mr. Federighi to you?
```

39. PAGE 97:12 TO 97:12 (RUNNING 00:00:00.771)

```
12         A   I do.
```

40. PAGE 97:14 TO 99:23 (RUNNING 00:01:56.198)

```
14              And do you see in the middle of the page
15    there, there's a message from you dated April 7,
16    2013, where you said (as read and/or reflected:)
17                  We really need to bring
18              iMessage to Android.  I have had a
19              couple of people investigating this
20              but we should go full speed and
21              make this an official project.
22              Do you see that?
23         A   I do.
24         Q   Okay.
25              And was that a belief that you held at that
00098:01    time in April of 2013?
02         A   That was, yes.
03         Q   Okay.
04              And then above that at 10:04 p.m. on the
05    same day, you say (as read and/or reflected:)
06                  Do we want to lose one of the
07              most important apps in a mobile
08              environment to Google?  They have
09              search, mail, free video and
10              growing quickly in browsers.  We
11              have the best messaging app and we
12              should make it the industry
13              standard.  I don't know what ways
14              we can monetize it but it doesn't
15              cost us a lot to run.
16              Do you see that?
17         A   I do.
18         Q   And did you believe that statement when you
19    wrote it?
20         A   I did.
21         Q   Okay.
22              Then Mr. Federighi writes to you and he
23    says (as read and/or reflected:)
24                  Do you have any thoughts on
25              how we would make switching to
00099:01              iMessage (from WhatsApp) compelling
02              to masses of Android users who
03              don't have a bunch of iOS friends?
```

```
04                iMessage is a nice app/service, but
05                to get users to switch social
06                networks we'd need more than a
07                marginally better app.  (This is
08                why Google is willing to pay
09                $1 billion--for the network, not
10                for the app).
11                And then it goes on (as read and/or
12      reflected:)
13                    In the absence of a strategy
14                to become the primary messaging
15                service for to bulk of cell phone
16                users -- that's a mistake in the
17                text -- I am concerned the iMessage
18                on Android would simply serve to
19                remove an obstacle to iPhone
20                families giving their kids Android
21                phones.
22                Do you see that?
23        A    I do.
```

41. PAGE 100:17 TO 101:04 (RUNNING 00:00:41.916)

```
17        Q    Let's turn to PX 408.  And this is another
18      series of texts.
19            This one, if you look at the bottom of the
20      page, the first page of PX 408, you'll see that it's
21      the continuation of the discussion that's just been
22      left behind in PX 407.
23            And you'll see that Mr. Schiller is writing
24      to you, and he says (as read and/or reflected:)
25                iMessage was created as a
00101:01          feature of iOS that brings value to
02                our iPhone users.
03                Do you see that?
04        A    I do.
```

42. PAGE 102:20 TO 102:23 (RUNNING 00:00:18.766)

```
20        Q    Do you -- in your view, do you believe that
21      not having iMessage on Android has created an
22      obstacle to families giving their kids Android
23      phones?
```

43. PAGE 102:25 TO 102:25 (RUNNING 00:00:01.439)

```
25                THE WITNESS:  No, not at all.
```

44. PAGE 109:04 TO 109:18 (RUNNING 00:00:45.516)

45. PAGE 109:19 TO 110:17 (RUNNING 00:01:21.644)

46. PAGE 114:14 TO 114:19 (RUNNING 00:00:22.575)

```
14              MS. FORREST:  PX 416 is a two-page document
15     that is dated 4 March 2016 from Mr. Cook to Mr. Cue
16     and Mr. Federighi.  And it bears the Bates numbers
17     at the bottom -02970610 through -11.
18          Q   Tell me when you've had an opportunity to
19     review this document, Mr. Cue.
```

47. PAGE 114:20 TO 115:02 (RUNNING 00:00:14.418)

```
20          A   I've reviewed it.
21          Q   All right.
22              Did you receive this document on or about
23     the 4th of March 2016?
24          A   I did.
25          Q   And did you receive it in connection with
00115:01   your duties and responsibilities at Apple?
02          A   I did.
```

48. PAGE 115:17 TO 116:08 (RUNNING 00:00:49.309)

```
17              PX 413 is a document that is from Sanjay,
18     S-a-n-j-a-y, Mathur, M-a-t-h-u-r, to Eddy Cue and
19     Mr. Schiller, dated 14 November 2020.  It bears the
20     Bates numbers at the bottom -05589233, running
21     consecutively through -240.
22              (Whereupon Cue Exhibit 413 was
23              marked for identification and
24              attached hereto.)
25     ///
00116:01   BY MS. FORREST:
02          Q   And the next document is PX 414, which is
03     from Todd Teresi, T-e-r-e-s-i, to Mr. Cue and
04     Mr. Schiller, dated 2 September 2019, bearing the
05     Bates numbers at the bottom -09654732 through -746.
06              (Whereupon Cue Exhibit 414 was
07              marked for identification and
08              attached hereto.)
```

49. PAGE 117:13 TO 117:19 (RUNNING 00:00:15.560)

```
13          Q   And did you receive PX 413 on or about the
14     14th of November 2020?
15          A   Yes.
16          Q   And you received it in connection with your
```

```
        17    duties and responsibilities at Apple?
        18        A    Yes.
        19        Q    And if we turn to PX 414, this is for an
```

50. PAGE 117:24 TO 118:01 (RUNNING 00:00:10.190)

```
        24             Is this also one of those same weekly
        25    reports relating to search ads?
00118:01        A    Yes, it is.
```

51. PAGE 120:20 TO 121:01 (RUNNING 00:00:18.759)

```
        20             Did you receive a copy of Exhibit 80 with
        21    Exhibit 79 on or about the 20th of June 2013?
        22        A    I did.
        23        Q    And did you receive that -- those materials
        24    in connection with your duties and responsibilities
        25    at Apple?
00121:01        A    I did.
```

52. PAGE 126:20 TO 126:25 (RUNNING 00:00:13.211)

```
        20        Q    Let me just sort of try the question again.
        21             Putting aside the reasons why, did you ever
        22    try to move your library of movies and filmed
        23    entertainment from an iPhone to an Android?
        24        A    I did not because I know that that doesn't
        25    work.
```

53. PAGE 128:07 TO 128:25 (RUNNING 00:00:44.325)

```
        07             So Exhibit 415 is a document from Mr. Cue
        08    to a number of individuals, the first of whom is
        09    Mr. Jeff Robbin, R-o-b-b-i-n; it's dated 3 September
        10    2013.  Subject (as read and/or reflected:)
        11                  9 smart and useful features of
        12             Apple's iPhone ecosystem that make
        13             it hard to switch-tech news and
        14             analysis.
        15             Bearing the Bates numbers at the bottom
        16    -09184163 through -66.
        17             (Whereupon Cue Exhibit 415 was
        18             marked for identification and
        19             attached hereto.)
        20    BY MS. FORREST:
        21        Q    My first question to you, Mr. Cue, when
        22    you've had an opportunity to review this is whether
        23    you recognize it.
        24        A    Again, I don't recall, but I'm sure I sent
        25    it.
```

54. PAGE 135:08 TO 136:14 (RUNNING 00:01:42.311)

```
        08             How was the 30 percent arrived at?
        09        A    Back when we started the App Store, we
        10    wanted to look at what the markets were for
        11    distributing software and what the commission rates
        12    were at those times.
        13             And so we looked at the industry that was
        14    out there selling mainly hard goods of software.
        15    There wasn't really any kind of App Store.  Again,
        16    we were -- something that was brand-new that was
        17    created by us, but there were other ways to
        18    distribute software before us.
        19             And so we looked at those models, and they
        20    all tended to be anywhere from 40 to 50 percent,
        21    plus there was some significant cost in returns and
        22    other things that wouldn't happen in our App Store.
        23             And so looking at the different market, we
        24    came up with 30 percent, which was a huge decrease
```

```
        25    to what everyone was paying at the time.  And we
  00136:01    thought we'd get developers really excited about
        02    participating in the platform.
        03        Q    Who were the individuals who were involved
        04    in the decision as to what percentage commission to
        05    charge in that regard?
        06        A    I believe the primary members, as I recall,
        07    was myself and Steve.
        08        Q    And you say "Steve," you mean Steve Jobs?
        09        A    Sorry.  Yes.  I meant Steve Jobs.
        10        Q    Anyone else?
        11        A    Again, I think that the decision, I'm sure,
        12    was made by myself and Steve.  There were -- there
        13    could have been others that participated in it, but
        14    I think the decision was left to the two of us.
```

55. PAGE 137:23 TO 138:14 (RUNNING 00:00:48.648)

```
        23        Q    Do you recall whether or not the costs of
        24    development of the SDKs, for instance, that
        25    developers were going to be using to write apps
  00138:01    figured into the choice of the 30 percent
        02    commission?
        03        A    I don't recall.  I don't know.
        04        Q    Do you know whether or not the costs of any
        05    tools were used as part of the decision-making
        06    process as to what level of commission to charge?
        07        A    Again, I don't recall, it may have been,
        08    but, again, wasn't the primary vehicle we used.
        09        Q    Do you recall whether any additional
        10    developer services and the cost of those services
        11    was factored into the selection of the amount of the
        12    commission?
        13        A    Again, it may have but wasn't the primary
        14    vehicle.
```

56. PAGE 139:05 TO 139:14 (RUNNING 00:00:25.670)

```
        05    piece.  I am sure that somebody from finance would
        06    look or decide whether that price was -- we would
        07    lose a lot of money.  So I'm sure that that was
        08    viewed as a price that would lose a lot of money
        09    from that viewpoint.
        10        But, again, I don't recall it from that
        11    point.  We wanted to do something that was highly
        12    competitive so that developers would join.
        13        And so we wanted it to be cheap compared to
        14    anything that they had experienced before.
```

57. PAGE 141:13 TO 141:20 (RUNNING 00:00:25.501)

```
        13        So I guess what I'm trying to figure out is
        14    between the time that you and Steve Jobs came up
        15    with the 30 percent commission until today, have you
        16    been involved in any discussions where people have
        17    exchanged either through in-person meetings or
        18    e-mail exchanges, here's our breakdown as to why we
        19    need the 30 percent cost or the 30 percent
        20    commission?
```

58. PAGE 141:22 TO 142:09 (RUNNING 00:00:31.597)

```
        22        THE WITNESS:  Sorry.  If you phrased in
        23    that way, the answer would be no.  The discussions
        24    that would have taken place, and, again, I -- not my
        25    primary thing so I wouldn't have paid attention to
  00142:01    it.
        02        We obviously monitor our costs and what our
        03    costs are in running Apple at different points and
```

```
04   different locations and different pieces of it.  So
05   I'm sure there are people that are looking at the
06   cost of doing things around it.
07           As it relates to the 30 percent of, like,
08   here's our justification for doing that, no, I don't
09   recall having a conversation like that.
```

59. PAGE 143:25 TO 144:06 (RUNNING 00:00:18.722)

```
25             So we've marked as Plaintiffs' Exhibit 417
00144:01   a document from Mr. Schiller to Mr. Cue, dated 28
02   July 2011, bearing the Bates numbers at the bottom
03   -00138494 through -97.
04             (Whereupon Cue Exhibit 417 was
05             marked for identification and
06             attached hereto.)
```

60. PAGE 145:06 TO 145:13 (RUNNING 00:00:20.866)

```
06             Did you receive this document on or about
07   the 28th of July 2011?
08       A   I did.
09       Q   And did you receive it in connection with
10   your duties and responsibilities at Apple?
11       A   I did.
12       Q   Do you recall receiving this document?
13       A   I don't, but seeing it now, I'm sure I did.
```

61. PAGE 150:05 TO 150:12 (RUNNING 00:00:19.396)

```
05       Q   So at you sit here today, because I want to
06   make sure I move away from what might be possible to
07   what you can actually recall, are you aware of any
08   developers who have said that they would not launch
09   a native iOS app because of the 30 percent
10   commission structure?
11       A   Yes.  I'm aware that some developers have
12   said that.
```

62. PAGE 151:18 TO 152:12 (RUNNING 00:00:48.257)

```
18             So let's take a look at PX 418.  I'll
19   identify it while you take a look at it.
20             It's to Eddy Cue from Matt Fischer, dated 7
21   March 2011, bearing the Bates number at the bottom
22   -45793 through -45794.
23             (Whereupon Cue Exhibit 418 was
24             marked for identification and
25             attached hereto.)
00152:01   BY MS. FORREST:
02       Q   If you could let me know when you've had an
03   opportunity to look at this, I would be
04   appreciative.
05       A   I've looked at it.
06       Q   Okay.
07             Did you receive a copy of what's been
08   marked as PX 418 on or about the 7th of March 2011?
09       A   I do.
10       Q   And you received that in connection with
11   your job at Apple?
12       A   I did.
```

63. PAGE 153:23 TO 154:02 (RUNNING 00:00:13.769)

```
23             So you -- the document indicates that Kazaa
24   was not going to launch a native iOS app because of
25   the 30 percent commission, but the only information
00154:01   you have about that is what's contained in this
02   document, which is PX 418; is that right?
```

64. PAGE 154:04 TO 154:04 (RUNNING 00:00:01.722)

```
04              THE WITNESS:  That's all I recall, yes.
```

65. PAGE 154:07 TO 154:12 (RUNNING 00:00:21.732)

```
07              Are you aware that there was a time when
08     Netflix ran a series of experiments to determine
09     whether or not IAP was, in fact, increasing the
10     number of subscribers it was obtaining in various
11     geographies?
12         A    I am.
```

66. PAGE 154:25 TO 155:03 (RUNNING 00:00:17.650)

```
     25              And do you recall that Netflix indicated to
00155:01     Apple that IAP customers had much shorter
     02     subscription lives due to voluntary churn than
     03     non-IAP customers?
```

67. PAGE 155:05 TO 155:05 (RUNNING 00:00:01.471)

```
05              THE WITNESS:  Sorry.  I'm aware of that.
```

68. PAGE 163:11 TO 163:15 (RUNNING 00:00:21.798)

```
11         Q    Are you aware of anyone, as you sit here
12     today, who has switched from using an iPhone to an
13     Android because of the -- a particular availability
14     of an app on Android that was not available on iOS?
15         A    Again, I can't name somebody, no.
```

69. PAGE 164:03 TO 164:19 (RUNNING 00:00:53.045)

```
03              Are you aware that there was a point in
04     time in August of 2020 when Epic Games began to
05     include an additional payment processing method
06     within the Fortnite app?
07         A    Yeah.  Let me -- just to make sure we agree
08     on terminology here, they came up with a new
09     payment -- a direct payment method to them.
10              I -- when you say "payment processing,"
11     it's whatever, I don't know what you mean by that.
12              But, again, they provided a direct payment
13     mechanism to them.  So I am aware of that.
14         Q    Okay.
15              Are you aware of any studies that have
16     occurred or analyses as to whether or not there were
17     any security vulnerabilities introduced onto any
18     iPhone as a result of that direct payment method
19     from Epic?
```

70. PAGE 164:21 TO 164:21 (RUNNING 00:00:02.138)

```
21              THE WITNESS:  I don't recall anything.
```

71. PAGE 168:07 TO 168:18 (RUNNING 00:00:22.438)

```
07              You are aware of apps which have sold
08     things to customers, and the customers have claimed
09     they have been defrauded by those apps; correct?
10         A    Correct.
11         Q    Okay.
12         A    Correct.
13         Q    And that has occurred from time to time
14     since the beginning of apps that were available to
15     sell things to consumers; is that right?
16         A    Since we've built our App Store, you mean?
17         Q    Yeah.
18         A    Yes.
```

72. PAGE 169:01 TO 169:04 (RUNNING 00:00:09.475)

```
00169:01            There have been apps which have been in the
      02    App Store, which you have received complaints from
      03    time to time, have been defrauding customers; is
      04    that right?
```

73. PAGE 169:06 TO 169:09 (RUNNING 00:00:12.822)

```
      06            THE WITNESS:  We have had apps in the store
      07    that have defrauded customers that have potentially
      08    taken their data, you know, all kinds of security
      09    and privacy issues.
```

74. PAGE 169:12 TO 169:15 (RUNNING 00:00:10.377)

```
      12            And when Apple learns of those issues,
      13    Apple attempts to take action, responsive action, to
      14    eliminate those issues; is that right?
      15        A    That's correct.
```

75. PAGE 170:09 TO 170:12 (RUNNING 00:00:10.878)

```
      09            Are you aware of an instance in which a
      10    direct payment method has resulted in specific
      11    software changes that have introduced a security
      12    vulnerability?
```

76. PAGE 170:14 TO 170:14 (RUNNING 00:00:01.854)

```
      14            THE WITNESS:  I'm not sure.
```

77. PAGE 171:23 TO 172:01 (RUNNING 00:00:14.751)

```
      23            Are you aware of any of the credit card
      24    platforms that you have used as having introduced
      25    particular security vulnerabilities onto the iPhone
00172:01    hardware?
```

78. PAGE 172:03 TO 172:09 (RUNNING 00:00:15.357)

```
      03            THE WITNESS:  No.  I don't think that would
      04    be possible.
      05    BY MS. FORREST:
      06        Q    And how about for PayPal?  Are you aware of
      07    the utilization of PayPal in connection with IAP in
      08    any way as having introduced a security
      09    vulnerability onto the hardware?
```

79. PAGE 172:11 TO 172:12 (RUNNING 00:00:03.099)

```
      11            THE WITNESS:  Again, onto the hardware
      12    itself, I don't believe that's possible.
```

80. PAGE 173:05 TO 173:09 (RUNNING 00:00:13.514)

```
      05        Q    As you sit here today, can you recall any
      06    studies or analyses that Apple has done that
      07    examines potential performance differences between
      08    Web apps and native apps?
      09        A    Again, I don't recall.
```

81. PAGE 188:02 TO 188:09 (RUNNING 00:00:18.726)

```
      02            But you're aware that consumers from time
      03    to time spend money on both apps and in-app
      04    purchases, aren't you?
      05        A    Yes, I am.
      06        Q    Okay.
      07            Do you have any information that indicates
      08    to you what the average consumer spends on apps over
      09    the life cycle of an iPhone?
```

82. PAGE 188:11 TO 188:13 (RUNNING 00:00:04.977)

```
11          THE WITNESS:  No, I don't recall.  But
12   there may have been something published, but I don't
13   recall, no.
```

83. PAGE 188:25 TO 189:03 (RUNNING 00:00:12.150)

```
      25          Are you aware of any marketing material
00189:01   that Apple publishes that indicates how much the
      02   average consumer can expect to spend on apps over
      03   the life cycle of a phone?
```

84. PAGE 189:05 TO 189:05 (RUNNING 00:00:01.775)

```
05          THE WITNESS:  Again, I don't know.
```

85. PAGE 189:18 TO 189:22 (RUNNING 00:00:11.361)

```
18          So as you sit here today, you're unaware of
19   any analyses within Apple that look at the amount
20   that the average consumer would spend on apps; is
21   that right?
22      A   Correct.  I don't recall any.
```

86. PAGE 190:04 TO 192:16 (RUNNING 00:02:32.040)

```
      04          MS. FORREST:  Exhibit 420 is from Mr. Peter
      05   Stern to Mr. Phil Schiller and Mr. Eddy Cue,
      06   subject:  Netflix, dated July 25th, 2018.  And it
      07   bears the Bates number -02026598.
      08          (Whereupon Cue Exhibit 420 was
      09          marked for identification and
      10          attached hereto.)
      11          MS. FORREST:  And PX 421 is a two-page
      12   document from Mr. Stern to Mr. Schiller, copying
      13   Mr. Cue and Mr. Fischer, subject:  Timely (Netflix),
      14   July 30th, 2018.  And it bears the Bates numbers
      15   -02026861 through -62.
      16          (Whereupon Cue Exhibit 421 was
      17          marked for identification and
      18          attached hereto.)
      19   BY MS. FORREST:
      20      Q   We'll start with PX 420, Mr. Cue.
      21          Do you recognize this document?
      22      A   I do.
      23      Q   And did you receive it on or about
      24   July 25th, 2018, in connection with your duties and
      25   responsibilities at Apple?
00191:01      A   I did.
      02      Q   Okay.
      03          It says, in the beginning (as read and/or
      04   reflected:)
      05              Phil and Eddy,
      06              Matt and I met with Bill
      07          Holmes from Netflix (among others)
      08          today to hear the results of their
      09          IAP tests in ten countries.  Here
      10          were their takeaways as they
      11          conveyed them.
      12              The good news:  Netflix saw
      13          significant incremental volume from
      14          IAP:  37 percent of subscribers we
      15          captured were incremental to what
      16          they would have captured via Web
      17          alone.
      18              The bad news:  Apple IAP
      19          customers have much shorter lives
      20          due to voluntary churn than non-IAP
```

```
        21          customers - resulting in our
        22          incremental customers being worth
        23          30 percent as much as subscribers
        24          they capture themselves.
        25          Do you see that?
00192:01      A    I do.
        02      Q    Okay.
        03          And we spoke very briefly about this
        04   earlier today.
        05          And my question is whether Apple conducted
        06   its own study to determine whether or not the
        07   statement here that Apple IAP customers have much
        08   shorter lives due to voluntary churn than non-IAP
        09   customers was accurate or not.
        10      A    Yes.   That -- "study" is the wrong word.
        11   We didn't do any study that I'm aware of, but we
        12   looked at other developers or had conversations with
        13   other developers, and we discovered some things that
        14   we were doing in the process of subscriptions that
        15   were not what I would call best in the industry
        16   practices.
```

87. PAGE 192:17 TO 192:22 (RUNNING 00:00:19.796)

```
        17          And so in reality, this e-mail was actually
        18   good news, good news, because the bad news was
        19   something we could correct.   And over time we have
        20   corrected it and actually have a much higher rate
        21   of -- or I should say a much lower rate of voluntary
        22   churn based on all of the changes that we've made.
```

88. PAGE 194:18 TO 194:20 (RUNNING 00:00:09.791)

```
        18          Let's turn to PX 421.   And let me ask if
        19   you've received this document on or about July 30th,
        20   2018, in connection with your job at Apple?
```

89. PAGE 194:21 TO 194:21 (RUNNING 00:00:01.037)

```
        21      A    Yes.
```

90. PAGE 201:24 TO 201:25 (RUNNING 00:00:07.524)

```
        24      Q    Is there any plan right now to allow Web
        25   apps to be offered in the Apple Arcade?
```

91. PAGE 202:02 TO 202:03 (RUNNING 00:00:03.158)

```
        02          THE WITNESS:   I don't think so.   I haven't
        03   heard of any.
```

92. PAGE 247:15 TO 247:20 (RUNNING 00:00:15.950)

```
        15      Q    Do you know -- well, has Apple, to your
        16   knowledge, conducted any studies as to the relative
        17   pricing of apps on the App Store vis-a-vis the
        18   Google Play Store?
        19      A    I'm not aware of any study that I can
        20   recall.
```

93. PAGE 248:13 TO 248:20 (RUNNING 00:00:29.905)

```
        13          Are you aware of anyone who has ever
        14   switched from an iPhone to an Android because they
        15   perceived there to be some difference in the pricing
        16   of apps across the two platforms?
        17      A    I don't recall ever hearing that.
        18      Q    Is that something that Apple has studied,
        19   to your knowledge?
        20      A    No.   I don't recall ever seeing that.
```

94. **PAGE 333:16 TO 334:09 (RUNNING 00:01:07.276)**

```
    16              MS. MANIFOLD:  Let's look at Exhibit 438,
    17     which is an exhibit dated February 6, 2011.  It's
    18     from Mr. Jobs to you.  It's called Mag- -- easy for
    19     me to say -- "Magazine subscription write-up."  It's
    20     Bates stamped APL-APPSTORE_07175768.
    21              (Whereupon Cue Exhibit 438 was
    22              marked for identification and
    23              attached hereto.)
    24     BY MS. MANIFOLD:
    25         Q   I'll give you a minute to look at it, but
00334:01     my main question to you, is this an exchange that
    02     you had with Mr. Jobs in or about February 6th of
    03     2011?
    04         A   It is.
    05         Q   And did you receive this exchange in the
    06     ordinary course of business as part of your duties
    07     and -- did you receive this document as part of your
    08     duties and responsibilities at Apple?
    09         A   I did.
```

Epic Games, Inc. v. Apple Inc., No. 4:20-cv-05640-YGR-TSH (N.D. Cal.)

Deposition Designation of Scott Forstall (Volume 1 & 2)
(March 8, 2021)

Time

Epic Games, Inc.'s Designations (Blue Highlight)	Apple Inc.'s Designations (Yellow Highlight)
36 minutes 12 seconds	32 minutes 5 seconds

Forstall, Scott (Vol. 01) – March 8, 2021   1 CLIP (RUNNING 01:03:58.057)

---

82 SEGMENTS (RUNNING 01:03:58.057)

---

1. PAGE 13:13 TO 13:15 (RUNNING 00:00:03.000)

```
13                    SCOTT FORSTALL,
14  having been administered an oath, was examined and
15  testified as follows:
```

2. PAGE 14:05 TO 14:06 (RUNNING 00:00:04.273)

```
05          Please state your full name for the record.
06      A.  Scott James Forstall.
```

3. PAGE 22:02 TO 22:05 (RUNNING 00:00:09.750)

```
02      Q.  And so going back to the date I mentioned
03  earlier, your departure from Apple was publicly
04  announced in late October 2012; is that right?
05      A.  Correct.
```

4. PAGE 37:23 TO 38:01 (RUNNING 00:00:07.715)

```
23      Q.  Understood.  So let me clarify.  Was Xcode
24  an integrated development environment when it was
25  released in 2003?
00038:01    A.  Yes.
```

5. PAGE 38:06 TO 38:08 (RUNNING 00:00:09.027)

```
06      Q.  And was Xcode used internally at Apple to
07  develop applications for the Mac?
08      A.  Yes.
```

6. PAGE 40:08 TO 40:09 (RUNNING 00:00:03.915)

```
08          Did Apple ever charge third party developers
09  for OS X?
```

7. PAGE 40:12 TO 40:15 (RUNNING 00:00:18.096)

```
12          So while I was there, you're asking was the
13  IDE a free download?
14      Q.  Yes, that's what I'm asking.
15      A.  Yes, I believe it was.
```

8. PAGE 40:24 TO 41:04 (RUNNING 00:00:23.060)

```
24      Q.  And you understood at the time that the
25  more -- the better applications that developers could
00041:01  offer for Mac, that would help Apple make its
02  customers, its Mac customers, happier and hopefully
03  enlarge the number of Mac -- Mac customers that Apple
04  has, correct?
```

9. PAGE 41:06 TO 41:13 (RUNNING 00:00:24.598)

```
06          THE WITNESS:  Having more robust platform
07  with nominal applications from Apple and third party
08  developers is good for the platform, the customers
09  and the developers.
10  BY MR. EVEN:
11      Q.  And when you say it's good for the platform,
12  it's good for Apple it's going to sell more
13  computers, right?
```

10. PAGE 41:15 TO 41:18 (RUNNING 00:00:07.937)

```
15          THE WITNESS:  It would likely sell more
16  computers.  It also may make customers who've already
17  bought a computer happier because they have that
18  application.
```

11. PAGE 52:21 TO 53:23 (RUNNING 00:02:05.600)

```
21          Q.   When did you become involved with
22  development of the iPhone?
23          A.   You're asking when I became or when Apple
24  started or the year, part of the project, what --
25          Q.   I'm asking when you became, that was my
00053:01  question.  When did you become involved?
02          A.   Well, I helped start the project itself.  So
03  from day one.
04          Q.   And what year was that?
05          A.   I think it would -- it's hard to capture
06  exactly when you consider the iPhone piece of it,
07  'cause we actually started by developing for a tablet
08  and then we shifted to developing a phone and put the
09  tablet on hold and then came back and developed the
10  iPad post iPhone.
11          I think it was around 2003, 2004, when that
12  work began.
13          Q.   When you say "that work began," you're
14  referring to the early work on a tablet?
15          A.   Correct.
16          Q.   And when did that work morph into a work --
17  into work on a phone?
18          A.   2004, 2005, I think.
19          Q.   And were you tasked with creating the
20  operating system for that phone?
21          A.   Yes.  I was tasked with creating the
22  operating system and the user interface for all the
23  software.
```

12. PAGE 54:06 TO 54:13 (RUNNING 00:00:44.285)

```
06          Q.   And was macOS 10 used as the basis for that
07  operating system that you oversaw building?
08          A.   Broadly speaking, yes.  There's many aspects
09  of macOS 10.  Some of those code bases were modified
10  to be used as the basis of iPhone OS 1.0.  Some of
11  the code bases were cleaved.  Some of the code bases
12  were replaced.  It was on a functionality and module
13  basis.
```

13. PAGE 57:02 TO 57:05 (RUNNING 00:00:11.899)

```
02          Q.   And who was the main proponent of using the
03  macOS 10 as the basis for the operating system for
04  the phone?
05          A.   I was.
```

14. PAGE 58:07 TO 58:17 (RUNNING 00:00:50.406)

```
07          What did you view as the main advantage of
08  using macOS 10 as the basis for a phone operating
09  system?
10          A.   We built macOS 10 specifically to be a
11  modern operating system as different from, as we
12  talked earlier, macOS 7, macOS 8, macOS 9.  So many
13  of the facilities for protected memory, preemption
14  are available in macOS 10.
15          So it had exactly the modern operating
16  system facilities we would want to use in any
17  project.
```

15. PAGE 62:11 TO 62:14 (RUNNING 00:00:09.940)

```
11      Q.    Mr. Forstall, let me mark as Exhibit 869 a
12   document Bates stamped APL-EG_00422472.
13            (Exhibit 869 was marked for identification
14      and is attached hereto.)
```

16. PAGE 63:02 TO 63:05 (RUNNING 00:00:17.341)

```
02      Q.    Mr. Forstall, do you see this is a December
03   31, 2006 e-mail from Ms. Meriko Borogove to you and
04   copying some others?
05      A.    Yes.
```

17. PAGE 64:19 TO 64:21 (RUNNING 00:00:12.623)

```
19      Q.    Was the ultimate phone released with an
20   operating system that's based on macOS 10?
21      A.    Yes.
```

18. PAGE 65:18 TO 66:10 (RUNNING 00:01:04.590)

```
18            Who was Ms. Borogove?
19      A.    She was an engineering manager in my team.
20      Q.    And she writes in the second paragraph
21   (as read):
22                Our security model around
23                preventing third parties from
24                installing and running their own
25                code ...
00066:01            And she continues.  Do you see that
02   sentence?
03      A.    I do.
04      Q.    And so at that time, the security approach
05   taken by Apple was to not allow any third party apps
06   to be installed on the phone, correct?
07            MS. MOYE:  Object to the form.
08            THE WITNESS:  Our plan for the first release
09   of the iPhone was not to enable native compiled third
10   party apps to install and run on the iPhone.
```

19. PAGE 66:12 TO 66:20 (RUNNING 00:00:50.833)

```
12      Q.    And Ms. Borogove then described some of the
13   steps that were taken by Apple to make sure that
14   native compiled apps cannot be installed on the
15   phone, correct?
16      A.    Correct.
17      Q.    And Apple needed to take many steps to
18   prevent such installation because macOS 10 was built
19   in part to allow native compiled applications to be
20   installed on it, correct?
```

20. PAGE 66:22 TO 66:23 (RUNNING 00:00:09.042)

```
22            THE WITNESS:  MacOS 10 enabled developers to
23   compile, install, and run applications.
```

21. PAGE 77:16 TO 77:20 (RUNNING 00:00:28.671)

```
16            And so my question was:  With respect to
17   third party applications, was there a difference of
18   view among executives at Apple as to whether Apple
19   will or will not open the iPhone for such
20   applications after it had released the first iPhone?
```

22. PAGE 77:22 TO 77:23 (RUNNING 00:00:04.390)

```
22            THE WITNESS:  On this particular question,
23   it's a great example where the specificity matters.
```

23. PAGE 77:24 TO 78:12 (RUNNING 00:00:58.365)

```
         24    There were executives at Apple that thought we should
         25    never release the ability for third parties to do any
00078:01         natively compiled applications.
         02            There were executives who thought -- and
         03    they thought we should just have web applications
         04    and -- and then websites running with web standards
         05    inside of the browser or browsers on the platform,
         06    the browser.
         07            There were executives who thought we should
         08    have a hybrid model of some web technologies and some
         09    native abilities.  And then there were executives who
         10    thought we should provide a platform to enable third
         11    parties to build fully native applications on the
         12    platforms.
```

24. PAGE 78:16 TO 79:06 (RUNNING 00:01:08.107)

```
         16            Who are the executives who fell into the
         17    first bucket that you mentioned that felt that Apple
         18    should never open up the platform to third party
         19    native applications?
         20      A.    Steve Jobs was the most prominent of those.
         21    I don't remember specifically who else argued that
         22    point.  But Steve -- Steve thought that we should not
         23    enable third party app development at all, as needed
         24    app development.
         25      Q.    And is it fair to say that you stood on the
00079:01         other side of this, the other send of the spectrum on
         02    that particular issue?
         03      A.    I was probably the -- the most vocal
         04    advocate for enabling third party app development in
         05    an App Store, and this is discussions Steve and I had
         06    multiple times, heated ways.
```

25. PAGE 81:02 TO 84:06 (RUNNING 00:05:25.230)

```
         02      Q.    And you believed that native apps are going
         03    to, as you say here, provide a better experience for
         04    iPhone users, correct?
         05      A.    Correct.
         06      Q.    And looking back 15 years later, do you have
         07    any doubt that you were right at the time?
         08      A.    No.
         09      Q.    And why did you think that native apps will
         10    provide a better experience?
         11      A.    There are many, many reasons.  If you build
         12    a native app, you get to use the built-in frameworks
         13    as they were intended, as they were designed for a
         14    touch interface.  You have all the facilities we
         15    built to quickly build, iterate, debug these native
         16    applications.
         17            I mean, I can go on and on and on for the
         18    benefits of native application versus a web
         19    application, and they are voluminous.  They -- they
         20    are faster.  They use less memory.  They can take
         21    advantage of the native graphics, libraries, in a way
         22    that is either not available or would have to be
         23    shoehorned in for a web app or a different kind of
         24    application.
         25            So you can go -- you can go through and we
00082:01         can go through for hours the advantages, but I would
         02    say the most telling reason is when we were building
         03    the original iPhone, we were building most of the
         04    built-in apps as native apps.  So mail, calendar, we
         05    were building these as native apps.  And they
         06    performed fantastically, the behavior felt right.
```

```
07  They loaded quickly.  They -- you could switch
08  between applications quickly.  It was an exceptional
09  experience.
10          We wanted web applications, because Steve
11  had not agreed with me to enable third party apps in
12  the first version, I still had the team building it
13  as a platform so that we could quickly enable third
14  party apps.  This was part of my direction to the
15  team the whole time, even though Steve had said no.
16          But we wanted to make it so third party apps
17  that were based on web technologies and would be
18  enabled in version 10 would work as -- as best as we
19  could possible make them, because I still wanted
20  these to be a good experience, the best experience
21  they could be.
22          So we built a few of our own apps.  I think
23  it was like weather, stocks, maybe the calculator, I
24  think there was like three of those that we built as
25  web technology apps, and they were similar to what a
00083:01  third party could have built when we shipped.
02          And, in fact, in January of 2007 when we had
03  the keynote and launched the iPhone, those were
04  web-based apps at the time of that launch, and they
05  did not perform well.  We could tell using it that
06  they were not as good as performing as the built-in
07  apps.
08          Now, you can always through software start
09  to try to improve things, make its launch a little
10  better, use a little less memory, get a faster
11  processor, get more memory in the next iteration of
12  the iPhone.  You can do things to try to make it can
13  better.
14          But because of the architecture, it sits as
15  an extra layer on top of the native layer, and
16  therefore, it's never going to be faster than the
17  native layer.  There might be some advantages about
18  how the code loads in a modular fashion or something
19  else.  But it just, for us, it wasn't as good as the
20  native ones.
21          And therefore, after we announced the iPhone
22  and demonstrated the iPhone between that and June 29,
23  we rewrote all those apps as native apps and they --
24  they shipped as native apps on the first version of
25  the iPhone.
00084:01          So even though there are arguments people
02  can and did make for using web technologies as the
03  sole way for third parties to build apps, my
04  experience was very clear that those apps would not
05  be as good as native apps, and I wanted to have the
06  best possible apps in the platform we could.
```

26. PAGE 85:01 TO 85:09 (RUNNING 00:00:42.650)

```
00085:01     Q.   Fair to say that pretty quickly after the
02  launch of the iPhone, it became pretty clear that
03  there was huge demand from developers for the ability
04  to build native apps for the iPhone?
05     A.   Yes.
06     Q.   And one of the ways that this became clear
07  was that third party developers approached you and
08  asked whether they could do that; is that right?
09     A.   Yes.
```

27. PAGE 85:19 TO 85:24 (RUNNING 00:00:28.145)

```
19     Q.   And was one indicator that there were
20  constant attempt by hackers to essentially remove all
21  the protections that Ms. Borogove presented to us
```

```
22  awhile -- in the e-mail we read a little bit ago and
23  start loading third party applications, native
24  applications on to jail broken phones?
```

28. PAGE 86:01 TO 86:05 (RUNNING 00:00:21.761)

```
00086:01              THE WITNESS:  After we shipped, developers
     02  started jailbreaking phones and writing native
     03  applications and I took that as an indication of
     04  their passion to build applications, native
     05  applications, for the iPhone.
```

29. PAGE 87:13 TO 88:14 (RUNNING 00:02:10.071)

```
     13     Q.   Fair to say that at the time you understood
     14  that the attempts to block this tsunami of attempt
     15  of -- of third party obligations was futile and
     16  better for Apple to join in, rather than fight these
     17  attempts?
     18              MS. MOYE:  Object to the form.
     19              THE WITNESS:  So I would not say it that
     20  way.
     21  BY MR. EVEN:
     22     Q.   How would you --
     23     A.   I would say we were very concerned about
     24  people building viruses or malware for the phone, and
     25  so any activity that I saw that involved jailbreaking
00088:01  and then trying to create malicious code, we would
     02  vigilantly respond to and were not concerned, even if
     03  it were a tsunami that we would give up on that.
     04              We were going to be vigilant for all time as
     05  protecting people in the security and the privacy of
     06  their phones.  I thought as I'd argued a year earlier
     07  and -- and beyond that, that we should be creating a
     08  platform and both enable and encourage developers to
     09  build native apps for the phones.
     10              So I did not see this as a bad thing that
     11  developers wanted to dedicate their time and energy
     12  and lives to building something cool for our
     13  platform.  If that cool thing was not malware or a
     14  virus or something problematic.
```

30. PAGE 89:02 TO 89:25 (RUNNING 00:01:32.960)

```
     02     Q.   And one concern with jailbreaking I take it
     03  was that just like the mechanisms that Ms. Borogove
     04  wrote about that were not discriminating between
     05  malware and so-called good applications, once a phone
     06  is jail broken, all third party applications can go
     07  on it without any distinguishing between malware or
     08  malicious applications and good applications,
     09  correct?
     10              MS. MOYE:  Object to the form.
     11              THE WITNESS:  The danger with jailbreaking
     12  is, it breaks down, depending on how it's done,
     13  potentially all of the consumer protections build
     14  into the operating system.
     15              Now, jailbreaking in general like this can't
     16  be done accidentally.  So consumers are still
     17  protected in general, but if you do these certain
     18  things which involve plugging into a computer and --
     19  and going through a set of machinations, it does not
     20  only allow maybe some positives the consumer might
     21  believe or the developer might perceive of installing
     22  an application, a game in this case, but it has the
     23  very dangerous and significant downsides for
     24  consumers of opening their phone up to potential
     25  viruses or malware.
```

31. **PAGE 90:19 TO 90:22 (RUNNING 00:00:09.891)**

```
19       Q.   Got it.  What was your official title at the
20  time?
21       A.   Senior vice-president of software, iPhone
22  software something.
```

32. **PAGE 98:15 TO 103:15 (RUNNING 00:09:40.910)**

```
15       Q.   Mr. Forstall, let me mark as Exhibit 873 a
16  document Bates stamped APL-EG_00460878, and this is
17  an October 1 chain between yourself and Mr. Lamiraux,
18  if I'm pronouncing that right, and the subject is:
19  Re:  Cocoa Touch apps.
20           (Exhibit 873 marked for identification and is
21      attached hereto.)
22  BY MR. EVEN:
23       Q.   My first question is, is this an e-mail
24  chain you exchanged with Mr. Lamiraux in early
25  October 2007 in the ordinary course of your work at
00099:01  Apple?
02       A.   Give me a minute to look it over.
03       Q.   Sure.
04       A.   Okay.  Yes, this is an e-mail I received
05  during the normal course of business.
06       Q.   This is an e-mail you received and an e-mail
07  that you sent, right, it's an exchange of e-mails
08  between you and Mr. Lamiraux, correct?
09       A.   There is an e-mail that I sent to Henri and
10  there is his response as well.
11       Q.   So let's start with the subject.  What is
12  Cocoa Touch?
13       A.   Cocoa Touch is a name we used for the frame
14  works, notably normally the high level frame works
15  for Cocoa on the iPhones, the native frame works.
16           Now, it's used in multiple ways, sometimes
17  it's used to mean all the frame works, sometimes it's
18  used just to mean the user interface level.
19       Q.   Okay.  And when you wrote here:  Cocoa Touch
20  apps as the subject of your e-mail, that pertains to
21  native apps, third party apps on the iPhone, correct?
22       A.   Right.  I'm distinguishing here between web
23  apps which we had and continue to have and this is
24  talking about natively compiled iPhone apps for third
25  parties using the Cocoa Touch frame works.
00100:01  Q.   And -- you're writing (as read):
02               I'm trying to capture the issues
03           with taking Cocoa Touch public.
04           What am I missing.
05           Do you see that?
06       A.   I do.
07       Q.   And so -- and below, you try to capture the
08  issues with, that you've identified with opening up
09  the -- the iPhone for third party native apps,
10  correct?
11       A.   Correct.
12       Q.   And what was the role of Mr. Lamiraux?
13       A.   Henri led the team, the engineering team, he
14  was an engineering director, reporting directly to
15  me.  He was responsible for some of the native
16  frameworks and many of the native apps.
17       Q.   When you say "the native apps" you mean
18  Apple developed native apps, correct?
19       A.   The apps that shipped on the iPhone as part
20  of iPhone OS, correct.
21       Q.   And first you point to several risks in
22  making Cocoa Touch public, correct?
23       A.   Correct.
```

```
24      Q.   And you say, for example, the risks of
25   viruses.  That's one you identify, correct?
00101:01      A.   Correct.
02      Q.   Another one is:  Harder to switch
03   processors.
04           Why is it harder to switch processors?
05      A.   Yeah, this is a really big deal.  When you
06   have a native app, it is compiled into the
07   instruction set of a specific processor.  For
08   instance, if you're on a Windows machine now-a-days,
09   it's probably compiled into an Intel instruction set.
10           And what we had found when I -- you know,
11   I've worked at NeXT and we had actually switched
12   processors and then at Apple we had switched
13   processors again, if you have natively compiled apps
14   out there, that native binary will not just run on
15   your new processor.  You have multiple options for
16   this.
17           And so we talked earlier about this when we
18   brought up macOS 10 that we had, you know, like
19   Classic, but that's this, this blue box Classic
20   emulation mode that tries to take those processor
21   instructions and convert them into one that can run
22   on the new processor.
23           So in this case when I'm talking about was a
24   risk, well, if Apple is building only natively
25   compile applications and third parties are building
00102:01   web applications, a huge advantage to those third
02   parties of those web apps is no matter what Apple
03   does with the processor, those keep running, because
04   they're interpreted.
05           So each time you get a new, if Apple
06   switches iPhone -- this is true today.  If Apple
07   switches to a new processor those web apps have this
08   big advantage that they just keep running going
09   forward, because interpreted on the -- on the
10   processor.
11           And if Apple is running all -- all native
12   apps come from Apple, then to introduce a new phone
13   with a new processor, all you need to do is Apple
14   will recompile every one of those apps, the source
15   code to those apps, to the new processor and then
16   release it.
17           The liability here is if you now have third
18   party natively compiled apps and you want to bring
19   out a new processor which you think will be faster,
20   more security, whatever, and there will be advantages
21   this new processor might have, and there are third
22   party native apps in the marketplace that customers
23   are relying upon, you have to find some solution for
24   those customers.
25           The solution could be convince the
00103:01   developers to take that source code and recompile it
02   for the new processor.  Which might work.  But if
03   that, let's say that company is out of business or no
04   longer is staffing that app any more, doesn't want to
05   put in the amount of money and time and effort it
06   would take to recompile that, you get stuck.
07           So then you -- look, do you simulate it also
08   or do you have customers now who are left not being
09   able to buy a new iPhone because doing so would then
10   disable functionality in the form third party apps
11   they've come to rely upon for their business.
12      Q.   So essentially you get breakage with some of
13   the third party apps potentially if you switch
14   processors?
15      A.   Correct?
```

73

33. PAGE 108:22 TO 108:24 (RUNNING 00:00:10.324)

```
22      Q.   Let me now mark Exhibit 875, APL-EG_0098292.
23           (Exhibit 875 was marked for identification
24      and is attached hereto.)
```

34. PAGE 109:12 TO 109:23 (RUNNING 00:00:30.342)

```
12      Q.   First question was, what is "MacOS X
13   Embedded"?
14      A.   I think the authors of this document took it
15   to mean iPhone OS which would be used on the iPhone
16   and it was to be used to iPod Touch at the time, but
17   I think they're taking it to mean the same thing.
18      Q.   Okay.  And is this a document you had
19   received in the ordinary course of your work at
20   Apple?
21      A.   Likely.  I mean, I don't see a e-mail trail
22   anything, but this -- I would have expected to have
23   received this document.
```

35. PAGE 110:08 TO 110:13 (RUNNING 00:00:15.971)

```
08      Q.   And the document is prepared by three
09   people, Mitch Adler, John Wright, and Dallas
10   De Atley.
11           Do you see that?
12      A.   Well, it says "et al."  So it's prepared by
13   more than just them, but three named authors.
```

36. PAGE 111:02 TO 111:09 (RUNNING 00:00:33.826)

```
02      Q.   And were they -- was part of their -- was
03   part of their job to oversee security?
04      A.   Part of their job was to oversee security.
05      Q.   And did they oversee security on both
06   macOS 10 and iPhone or just one of them?
07      A.   I believe they were in groups that oversaw
08   security on both platforms and I do believe they
09   oversaw security on both platforms.
```

37. PAGE 111:10 TO 112:20 (RUNNING 00:02:19.911)

```
10      Q.   So going to the first page, do you see that
11   the document begins by saying (as read):
12              The transition from a closed
13           system to one with a more open
14           developer model demands answers to
15           questions of control and security.
16           Do you see that?
17      A.   I do.
18      Q.   Going further down under applications, they
19   say they assume the (as read):
20              Existence of a robust sandbox to
21           contain applications and developers.
22           Do you see that?
23      A.   By the way, I would not have characterized
24   the way they characterized that first statement, for
25   the record.
00112:01           So what's your second question.
02      Q.   What do you mean by you would not have
03   characterized the way they characterized, sorry?
04      A.   The statement you read said:  The transition
05   from a closed system to one with more open
06   developer -- a more open developer model demands
07   answers to questions of control and security.
08      Q.   Got it.
09      A.   And I would characterize ours as not a
10   closed system, because we did have both a web
```

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```
11  browser.  So all web applications ran, and we
12  supported these web apps.  I don't remember if the
13  web apps by this time could be placed on the home
14  screen as well, which I thought was important enough
15  that I think I'm the lead patent holder on that
16  patent.  So that was an important thing.
17          So -- so calling it a closed system, which
18  is their words, not mine, I would not say that.  I
19  would say that we were going to a -- more developer
20  opportunities with native apps.
```

38. PAGE 117:13 TO 117:18 (RUNNING 00:00:09.016)

```
13      Q.   And they say (as read):
14               Distribution through the web
15           should be supported, but Apple will
16           provide no transfer protection.
17           Do you see that?
18      A.   I do.
```

39. PAGE 117:25 TO 118:02 (RUNNING 00:00:09.934)

```
     25      Q.   And "through the web" here means through a
00118:01  website operated by the developer or through a store
     02  operated by a third party, correct?
```

40. PAGE 118:04 TO 118:05 (RUNNING 00:00:05.019)

```
04           THE WITNESS:  Well, it doesn't say, but it
05  would be through a mechanism that is not iTunes.
```

41. PAGE 118:07 TO 118:08 (RUNNING 00:00:06.753)

```
07      Q.   And not the App Store, correct?
08      A.   And not the App Store.  The Apple App Store.
```

42. PAGE 118:25 TO 119:17 (RUNNING 00:00:53.803)

```
     25      Q.   And if you go to appendix C, developer
00119:01  scenarios, the first one is:  Guy in his basement.
     02           Do you see that?
     03      A.   I do.
     04      Q.   And I gather this is their speak for small
     05  time developers, stand alone developer, correct?
     06      A.   Yes.
     07      Q.   And under 3:  Decide you have final version
     08  to deploy, do you see that they say what the
     09  developer needs to do, A -- or 3.1, sorry (as read):
     10               Submit to Apple for signing and
     11           then get signed image and deploy as
     12           you wish.
     13           Do you see that?
     14      A.   I do.
     15      Q.   And deploy as you wish here again, means
     16  distribute in whichever way you believe best serves
     17  your interests, correct?
```

43. PAGE 119:19 TO 119:24 (RUNNING 00:00:14.296)

```
19           THE WITNESS:  I could define it as you wish,
20  but you get assigned image and you deploy it
21  yourself.
22  BY MR. EVEN:
23      Q.   And "deploy" here means distribute, correct?
24      A.   Correct.
```

44. PAGE 125:12 TO 125:12 (RUNNING 00:00:01.979)

```
12  Exhibit 877.  And tab 877 -- sorry, PX877 is
```

45. PAGE 125:13 TO 125:15 (RUNNING 00:00:05.791)

```
13  APL-EG_01025133.
14          (Exhibit 877 was marked for identification
15      and is attached hereto.)
```

46. PAGE 127:03 TO 127:08 (RUNNING 00:00:34.474)

```
03      Q.   And this, too, came from your files, fair to
04  assume that this, too, is a document that you would
05  have received back in 2007?
06      A.   If you're correct about the date it was
07  created, I would have received it sometime around
08  when it was created, I'll expect.
```

47. PAGE 129:08 TO 129:24 (RUNNING 00:00:49.273)

```
08      Q.   Under Distribution Method, on page 2 you see
09  that it says (as read):
10          We will distribute third party
11          applications through the iTunes
12          Music Store.  However, our model
13          will allow for third parties to
14          distribute their own applications
15          and for enterprise customers to
16          deploy to their own devices.
17          Do you see that?
18      A.   I do.
19      Q.   And do you recall that there was a time
20  around October or November of -- of 2007, sorry,
21  where that was the plan of record at Apple, that
22  third parties could sign their applications as we've
23  seen before and then distribute as they wish, as this
24  last document we saw --
```

48. PAGE 130:05 TO 131:12 (RUNNING 00:01:28.868)

```
05          THE WITNESS:  Let me start with the first.
06  This statement says (as read):
07          We will distribute third party
08          applications through the iTunes
09          Music Store.
10          Okay.  Second sentence says (as read):
11          However, our model will allow for
12          third parties to distribute their
13          own applications ...
14          It does not say our policy is to allow that.
15  This is a technical document from a technical team
16  who is building the security infrastructure, and so
17  their statement here is that the model -- the
18  technical infrastructure they're building will allow
19  for other distribution mechanisms.
20  BY MR. EVEN:
21      Q.   Good.  Thank you.
22          And then it goes -- if you go further below,
23  do you see it says (as read):
24          Signing does not imply a specific
25          distribution method, and it's left
00131:01        as a policy decision as to whether
02          Apple signed application are posted
03          to the online store, or we allow
04          developers to distribute on their
05          own.
06          Do you see that?
07      A.   I do.
08      Q.   And do you recall that there was a time
09  around October or November 2007 when that policy
10  decision has not yet been made, it is up in the air?
11      A.   There was a time when that decision had not
```

```
12   yet been made.
```

49. PAGE 142:24 TO 145:08 (RUNNING 00:05:36.701)

```
         24      Q.   Do you recall that there was a debate within
         25   Apple about whether Apple should allow distribution
00143:01   only through the App Store or whether it should allow
         02   developers to distribute native apps through other
         03   means?
         04      A.   So there were discussions about what the
         05   distribution mechanisms could be, and as you pointed
         06   out in one of the white papers we looked at, it
         07   talked about potential mechanisms in the operating
         08   system for how to make each of these secure in
         09   different ways.
         10           And then there were discussions about how
         11   effective those different mechanisms could be and
         12   what mechanisms we should enable for our customers.
         13      Q.   Fair to say that there was a contingent
         14   within Apple that thought that developers should be
         15   able to distribute their apps through a different
         16   mechanism than the App Store?
         17           MS. MOYE:  Objection to the form.
         18           THE WITNESS:  There were discussions about
         19   how we could enable developers to distribute their
         20   apps, one being the App Store, another being
         21   distribute them sort of directly the way, say, people
         22   do on Windows.  Although, I think Windows might have
         23   an App Store also now.  But distribute, you know,
         24   through Windows.  Back in the day, you had to
         25   distribute through shrink wrap at a physical store.
00144:01           So we had discussions about the merits and
         02   dangers of distributing in different ways, within a
         03   company, and then beyond the company.
         04   BY MR. EVEN:
         05      Q.   And you don't recall arguments about whether
         06   Apple should or should not allow distribution through
         07   the web, for example?
         08      A.   I remember going through the various
         09   options.  I can't point to a specific conversation
         10   about some of these mechanisms, but I can recall my
         11   thinking on the reasons for doing certain ways and
         12   why certain mechanisms might be better or worse than
         13   others, and why we came to the conclusion that we
         14   did.
         15           And I'm certain there were people giving
         16   input and opinions on the merits for each of these
         17   different mechanisms, and that's just responsible to
         18   consider different mechanisms and the pros and cons
         19   of them.
         20           MR. EVEN:  Jessica, can you bring up 478,
         21   please.
         22      Q.   Who were the main proponents of distribution
         23   only through the App Store?
         24      A.   Sorry.  Is there a document I'm supposed to
         25   be looking at?
00145:01      Q.   Nope.
         02      A.   Okay.  Sorry.  I thought you said -- who
         03   were the proponents?  After we had gone through the
         04   discussion, I think basically all of the execs were
         05   proponents of the App Store, plus our enterprise
         06   distribution models as being the two best mechanisms
         07   to protect our mutual customers and get wide
         08   distribution for developers.
```

50. PAGE 161:20 TO 162:04 (RUNNING 00:00:42.406)

```
         20      Q.   Do you recall you gave a presentation, I
```

```
21   think we discussed that earlier, in March 2008,
22   introducing the SDKs for the iPhone?
23        A.   In 2008, we had an event where we launched
24   and publicly announced the iPhone SDK, in App Store.
25        Q.   And you personally presented in that -- in
00162:01   that event and specifically the portion about the
02   SDK, correct?
03        A.   Correct.
04        Q.   If you look at Exhibit 880.
```

51. PAGE 162:05 TO 162:12 (RUNNING 00:00:18.729)

```
05              (Exhibit 880 was marked for identification
06       and is attached hereto.)
07   BY MR. EVEN:
08        Q.   Do you recognize this as a transcript
09   prepared by Apple of the event on March 6, 2008,
10   launching the iPhone SDK?
11        A.   Yeah.  This appears to be a transcript of
12   that event.
```

52. PAGE 162:13 TO 162:16 (RUNNING 00:00:12.098)

```
13        Q.   After you were done introducing the SDKs,
14   you turned the -- the baton over to Mr. Jobs to
15   present the App Store; is that right?
16        A.   Yes.
```

53. PAGE 163:14 TO 164:11 (RUNNING 00:01:17.544)

```
14        Q.   If you go to the page ending in 075.
15        A.   Okay.
16        Q.   And you see that in the fourth paragraph
17   beginning:  "Now, developers."
18              Do you see that paragraph?
19        A.   I do.
20        Q.   And in the middle of the paragraph, Mr. Jobs
21   says (as read):
22              When we sell the app through the
23              App Store, the developer gets
24              70 percent of the revenues right off
25              the top.  We keep 30 to pay for
00164:01              running the App Store.
02              Do you see that?
03        A.   I do.
04        Q.   And going to the next paragraph he says,
05   second full sentence after the second question mark
06   (as read):
07              So when a developer wants to
08              distribute their app for free, there
09              is no charge for free apps at all.
10              Do you see that?
11        A.   Followed by "applause."  Yep.
```

54. PAGE 164:12 TO 164:25 (RUNNING 00:00:36.304)

```
12        Q.   And do you see that in the next paragraph,
13   Mr. Jobs said -- talks about some apps that will not
14   be allowed.  And then he says (as read):
15              ... we have exactly the same
16              interest as the vast majority of our
17              developers, which is to get a ton of
18              apps out there for the iPhone and we
19              think we've invented an incredibly
20              great way to do it ...
21              Do you see that?
22        A.   Yes.
23        Q.   You were there and heard all that being said
24   at the time, right?
```

```
        25      A.    Yes.
```

55. PAGE 165:01 TO 166:14 (RUNNING 00:02:04.050)

```
00165:01        Q.    Now, if you go to the page ending in 079.
       02       A.    Okay.
       03       Q.    And Mr. Jobs is being asked what sorts of --
       04  the bottom half of the page (as read):
       05              What sorts of safeguards have you
       06              built in to make sure that all these
       07              apps and applications that are going
       08              to be coming on to the iPhone are
       09              secure?
       10              Do you see that?
       11       A.    I do.
       12       Q.    And Mr. Jobs says how are we going to do
       13  that, and first he explains the way we're going to do
       14  it is that developers have to register with us, and
       15  for that $99 that they paid to join the program they
       16  actually get an electronic certificate, and that
       17  tells us who they are, and so if they write a
       18  malicious app we can track them down, we can tell
       19  their parents.
       20              Do you see that?
       21              (Reporter clarification.)
       22  BY MR. EVEN:
       23       Q.    Do you see that?
       24       A.    I do.
       25       Q.    And that is a version of the same signing
00166:01  mechanism that we have discussed now over multiple
       02  documents, correct?
       03       A.    That is part of this, yes.
       04       Q.    And then on the next page, Mr. Jobs says
       05  (as read):
       06              The other thing we can do since
       07              the distribution of their
       08              applications is going to be through
       09              the App Store, if we're alerted to a
       10              malicious app that we didn't catch,
       11              we'll turn off the spigots so no
       12              more people download it.
       13              Do you see that?
       14       A.    Yes.
```

56. PAGE 171:05 TO 171:16 (RUNNING 00:00:37.901)

```
       05       Q.    So let's look at that question, and that's
       06  on page 081.  And the question is at the top third --
       07  third sort of bullet, third paragraph (as read):
       08              Isn't the fact that Apple is
       09              going to be the exclusive
       10              distributor for all these
       11              applications raise some questions
       12              about monopolies and so forth?  What
       13              if a developer doesn't want to
       14              distribute through the App Store?
       15              Do you see that question?
       16       A.    I do.  I didn't realize that you attended
```

57. PAGE 173:05 TO 174:07 (RUNNING 00:01:25.966)

```
       05       Q.    Mr. Forstall, going down the page, you see
       06  that there's some back and forth, and then Mr. Jobs
       07  said (as read):
       08              Also, just to make it a little
       09              clearer, we don't intend to make
       10              money off the App Store.
       11              Do you see that statement?
```

```
       12      A.    I see that statement on the page.
       13      Q.    And do you see that then Mr. Jobs then
       14  explained that Apple doesn't make a lot of money off
       15  of iTunes.  Do you see that?
       16      A.    I do.
       17      Q.    And then he says -- I'm reading (as read):
       18              ... in the case of the iTunes
       19              Music Store, we give all the money
       20              to the content owners and we are
       21              basically giving all the money to
       22              the developers here and if that 30
       23              percent of it pays for running the
       24              store, well that will be great.
       25              Do you see -- did I read that correctly?
  00174:01      A.    Yes.
       02      Q.    And the 30 percent that Mr. Jobs is alluding
       03  to is the 30 percent commission that Apple keeps when
       04  there's a distribution of a paid app through the
       05  store, correct?
       06      A.    It's 30 percent of the gross revenue of an
       07  app through the App Store.
```

58. PAGE 174:08 TO 174:10 (RUNNING 00:00:12.992)

```
       08      Q.    You understand that for the past decade or
       09  so, the 30 percent that Apple keeps does much more
       10  than pay for running the store, correct?
```

59. PAGE 174:12 TO 174:13 (RUNNING 00:00:06.450)

```
       12              THE WITNESS:  I understand that app -- the
       13  30 percent is making Apple a profit.
```

60. PAGE 183:22 TO 184:01 (RUNNING 00:00:12.132)

```
       22      Q.    So with that, Mr. Forstall, if you can go to
       23  Exhibit 882, which is APL-EG_00260094.
       24              (Exhibit 882 was marked for identification
       25          and is attached hereto.)
  00184:01              MR. EVEN:  This document is a e-mail
```

61. PAGE 184:02 TO 184:07 (RUNNING 00:00:21.793)

```
       02  correspondence between Mr. Forstall and Mr. Schiller,
       03  dated January 21, 2008.
       04      Q.    Mr. Forstall, is this an e-mail chain that
       05  you sent and received as part of the ordinary course
       06  of your employment at Apple?
       07      A.    Yes.
```

62. PAGE 187:21 TO 188:07 (RUNNING 00:00:42.051)

```
       21      Q.    Okay.  And I think you mentioned earlier
       22  today when talking about, for instance, something
       23  like HTML5, you mentioned that HTML5 is sort of
       24  agnostic to the underlying processor because you --
       25  the developers write for HTML5, right?  And so HTML5
  00188:01  is a cross-platform platform in that sense?
       02      A.    HTML5 standards are interpreted code so they
       03  are agnostic to the specific processor on which they
       04  run.
       05      Q.    And in that sense they serve as a
       06  cross-platform platform for web app developers,
       07  correct?
```

63. PAGE 188:09 TO 188:12 (RUNNING 00:00:12.655)

```
       09              THE WITNESS:  For web app developers and web
       10  developers in general, they can serve as a
       11  cross-platform development platform, which sometimes
```

```
12  can work very well.
```

64. PAGE 188:13 TO 189:03 (RUNNING 00:01:00.060)

```
13           Now, they run inside of a browser generally,
14  and browsers have been built up with an enormous
15  amount of security over time.  I mean, even though
16  you see viruses sometimes come through web browsers,
17  but the more mature ones are getting better and
18  better at it.
19           Just as an aside, sometimes that works
20  really great and it's interesting like today we're
21  doing this deposition and we are using a native app,
22  which is Zoom so we can see each other, and then
23  we're using a web app to exchange documents.
24           Well, those documents, you know, that's an
25  important way to go and they're secure and that's
00189:01  being done through an app inside of a web browser,
02  too, HTML5 and beyond standards, so both mechanisms
03  of building can work well.
```

65. PAGE 189:21 TO 190:08 (RUNNING 00:00:27.436)

```
21      Q.   And so back then, too, you thought that what
22  they're planning is really a cross-platform platform
23  as you called it?
24      A.   Yes.
25      Q.   And you then say (as read):
00190:01           While I would prefer developers
02           use web standards -- you mention a
03           couple -- or go native if they want
04           more, I'm not sure we shouldn't take
05           the high ground and let them build
06           it and complete.
07           Do you see that?
08      A.   I do.
```

66. PAGE 192:23 TO 193:02 (RUNNING 00:00:17.436)

```
23      Q.   And Mr. Schiller has taken -- upon hearing
24  it has taken the initial opposite view to yours,
25  correct?
00193:01      A.   It sounds like his initial opinion is very
02  different from mine.
```

67. PAGE 193:03 TO 194:08 (RUNNING 00:01:23.379)

```
03      Q.   And at the end of the day, Mr. Schiller also
04  says (as read):
05           In the grand scheme of things --
06           of APIs we could choose to support
07           beyond our own, if we ever did
08           support another (which I don't
09           recommend), Yahoo's Widget API is
10           not even close to the most important
11           one we would pick, some of the other
12           ones I listed above (like Flash) are
13           way more important ...
14           Do you see that?
15      A.   I do.
16      Q.   Flash was another cross-platform platform?
17      A.   In some ways.  I mean, Flash is a pretty big
18  conversation in and of itself.
19      Q.   I understand.  I'm not trying to hear the
20  entire Flash story.
21      A.   Well, there's a long Flash story in here
22  which is -- I mean, yeah.  'Cause we tried to work
23  with them also.  Yes.  Flash can be used as a
24  cross-platform platform as well.
```

```
       25      Q.    And then Mr. Schiller (as read):
 00194:01             Besides, we have a way to do
       02            Widgets that competes with theirs,
       03            so who cares?
       04            Do you see that?
       05      A.    I do.
       06      Q.    And did Apple end up supporting the Yahoo
       07  widget engine?
       08      A.    We did not.
```

68. PAGE 194:09 TO 194:20 (RUNNING 00:00:44.060)

```
       09      Q.    Did you end up supporting Flash?
       10      A.    We did not ship Flash.  We tried to make
       11  Flash work.  We helped Adobe.  We -- we definitely
       12  were interested.  Again, this is one where I thought
       13  if we could help make it work, this could be great.
       14  Flash has been such a problem because it -- the way
       15  that it hooks into systems, it's been a virus
       16  nightmare on -- on Windows, even on the Mac.
       17            And when we got it running on iOS, the
       18  performance was just abysmal and embarrassing and it
       19  could never get to something which would be consumer
       20  value add.
```

69. PAGE 194:21 TO 194:22 (RUNNING 00:00:03.632)

```
       21      Q.    And so you never shipped with Flash either?
       22      A.    We did not.
```

70. PAGE 195:01 TO 195:10 (RUNNING 00:00:26.039)

```
 00195:01      Q.    Did you support Java?
       02      A.    We did not.
       03      Q.    And he also mentioned Adobe's Air.  Do you
       04  support Adobe Air?
       05      A.    I do not believe so.
       06      Q.    What about Microsoft Silverlight?
       07      A.    We did not support that.  I don't even know
       08  if that exists anymore, but we did not support that.
       09      Q.    And Qualcomm's Brew?
       10      A.    We did not support that.
```

71. PAGE 195:22 TO 196:03 (RUNNING 00:00:26.779)

```
       22      Q.    I wasn't suggesting that.  I asked whether
       23  you recall that there were cross-compilers available
       24  from third parties that allowed people to develop
       25  apps that would run on iOS.
 00196:01      A.    I think people were trying to create
       02  cross-compilers.  I don't remember if any of those
       03  were used in the real world.
```

72. PAGE 196:04 TO 196:07 (RUNNING 00:00:14.590)

```
       04      Q.    Do you recall that Apple at some point
       05  decided to ban the use of cross-compilers for
       06  developing apps for the -- for iOS?
       07      A.    Yes.
```

73. PAGE 198:10 TO 198:14 (RUNNING 00:00:14.132)

```
       10      Q.    Cross-compilers are used for cross-platform
       11  development, right?
       12      A.    In general they can be used for a couple
       13  things, but yes, they can be used for cross-platform
       14  development.
```

74. PAGE 206:14 TO 206:21 (RUNNING 00:00:12.042)

```
       14            (Exhibit 886 was marked for identification
```

```
15      and is attached hereto.)
16  BY MR. EVEN:
17      Q.   Do you see this is an e-mail from Philip
18  Schiller to yourself, copying Mr. Jobs on July 16,
19  2011?
20      A.   Give me a minute.  There's a lot of e-mails
21  in here, so I'm going to scan through it briefly.
```

75. PAGE 207:01 TO 207:06 (RUNNING 00:00:14.197)

```
00207:01      Q.   Mr. Forstall, is this an e-mail that you
02  received?
03      A.   Yes.
04      Q.   And is in an e-mail that you received as
05  part of the ordinary course of your work at Apple?
06      A.   Yes.
```

76. PAGE 208:02 TO 208:03 (RUNNING 00:00:03.628)

```
02           And Mark here again is Mr. Zuckerberg?
03      A.   Yep.
```

77. PAGE 208:04 TO 208:06 (RUNNING 00:00:18.353)

```
04      Q.   And so Facebook wanted to have either an
05  embedded web view or links to web apps in its iPad
06  native app, correct?
```

78. PAGE 208:08 TO 208:15 (RUNNING 00:00:23.502)

```
08           THE WITNESS:  Facebook was looking in their
09  iPad app to enable embedded apps with inside of that
10  app.
11  BY MR. EVEN:
12      Q.   And you told them they can't do that,
13  correct?
14      A.   We said they should not include embedded
15  apps inside of the native app.
```

79. PAGE 209:25 TO 210:11 (RUNNING 00:00:57.300)

```
25      Q.   And the concern is that if Facebook did
00210:01  this, if it did include these links, then it would
02  operate as a storefront for web apps, correct?
03           MS. MOYE:  Objection to the form.
04           THE WITNESS:  The idea is if they were doing
05  this -- I mean, there's many issues, it could be very
06  confusing to users if they're making it appear to be
07  an app store, but it's not taking you to the native
08  apps you can download on to a platform.  It's unclear
09  exactly what the point of that directory of links
10  with inside of an application would -- would present
11  itself as.
```

80. PAGE 211:08 TO 212:01 (RUNNING 00:01:07.900)

```
08      Q.   Mr. Forstall, what you told Mr. Zuckerberg
09  is not to include embedded apps in the Facebook iPad
10  app either in an embedded web view or as a directory
11  of links that would redirect to Safari.  This speaks
12  to HTML5 web apps, correct?
13      A.   No --
14           MS. MOYE:  Objection to the form.
15           THE WITNESS:  This speaks to what Facebook
16  would do in its native iPad app.  Facebook when using
17  HTML, HTML5, all web standards, as a website which
18  is, you know, how you probably access Facebook when
19  you're sitting on your Windows machine or your Mac,
20  that uses web standards and works exactly how they
21  built Facebook from day one.
```

```
        22          This is talking about what do they do in the
        23   native iPhone or iOS app and iPad app, in this case.
        24   BY MR. EVEN:
        25      Q.   I understand that, but that wasn't my
   00212:01   question, Mr. Forstall.
```

81. **PAGE 212:02 TO 212:04 (RUNNING 00:00:15.815)**

```
        02          My question was:  You told Mr. Zuckerberg
        03   that Facebook should not embed or link to HTML5 apps
        04   from its native app, correct?
```

82. **PAGE 212:06 TO 212:09 (RUNNING 00:00:19.344)**

```
        06          THE WITNESS:  I said -- the message that I
        07   delivered was that Facebook in their native app
        08   should not redirect to links that would take you to
        09   Safari in this directory.
```

84

Forstall, Scott (Vol. 02) - March 8, 2021   1 CLIP (RUNNING 00:07:40.616)

---

13 SEGMENTS (RUNNING 00:07:40.616)

---

1. PAGE 230:05 TO 230:11 (RUNNING 00:00:44.125)

```
05  Q.   Mr. Forstall, do you recall that after the
06  App Store opened, there were developers who deployed
07  mechanisms for collection of payments within their app;
08  for instance, through opening an embedded web app,
09  collect payment, things of that nature?
10  A.   I remember there was some sort of payment thing.
11  I don't remember the specifics.  I remember generally.
```

2. PAGE 230:16 TO 230:18 (RUNNING 00:00:16.143)

```
16  Q.   Okay, but you were aware that developers found
17  ways to -- to make sales within their app, and collect
18  payment for those sales?
```

3. PAGE 230:20 TO 230:22 (RUNNING 00:00:08.518)

```
20         THE WITNESS:  I remember a general concept
21  that some developers were trying to collect payment
22  through their apps.
```

4. PAGE 230:24 TO 231:02 (RUNNING 00:00:18.824)

```
      24  Q.   And do you recall there came a time when Apple
      25  decided to offer its own payment mechanism for
00231:01  applications that sold digital content?
      02  A.   Yes.
```

5. PAGE 231:06 TO 231:08 (RUNNING 00:00:12.291)

```
06  Q.   And applications that sold physical goods remained
07  free to use whatever other mechanisms they wanted.
08  They couldn't use the Apple mechanism.  Correct?
```

6. PAGE 231:15 TO 231:19 (RUNNING 00:00:18.786)

```
15         THE WITNESS:  Apps could not use Apple's
16  in-app purchase for the sale of physical goods.
17  BY MR. EVEN:
18  Q.   But they could use other mechanisms.  Correct?
19  A.   Yes.
```

7. PAGE 232:05 TO 232:07 (RUNNING 00:00:17.530)

```
05  Q.   But apps that sold digital content were required
06  to do so using the IAP API.  Correct?
07  A.   Correct.
```

8. PAGE 234:08 TO 234:08 (RUNNING 00:00:02.128)

```
08  Q.   If you look at Exhibit 888, Exhibit 888 is Bates
```

9. PAGE 234:09 TO 234:17 (RUNNING 00:00:43.244)

```
09  stamped APL-APPSTORE_10080247.  And it's a cover
10  email attaching a -- what appears to be a slide deck,
11  with the tagline "App Commerce Models."  Do you see
12  that?
13  A.   I do.
14  Q.   And is that an email that you received together
15  with its -- with its attachment on 11 December 2008 in
```

16   the ordinary course of your work at Apple?
17   A.   Yeah.

10. PAGE 252:06 TO 252:13 (RUNNING 00:00:29.053)

06   Q.   Okay.   We discussed earlier that there were some
07   apps on the App Store prior to the release of IAP
08   that were using their own payment mechanisms for
09   different kinds of purchases made in the app.   Correct?
10   A.   Correct.
11   Q.   And some of those then needed to switch over to
12   IAP once IAP was released.   Correct?
13   A.   At some time frame.

11. PAGE 252:16 TO 254:10 (RUNNING 00:03:25.791)

16   Do you recall, without divulging any legal advice,
17   all the reasons why Apple decided to require that all
18   digital sales must use API [sic]?
19   MS. MOYE: Do you mean to say "IAP"?
20   MR. EVEN: IAP. Sorry.
21   THE WITNESS: I mean, there are a number of
22   reasons we added IAP. It was to make it easier for
23   developers to sell digital goods.
24   If you're a game developer and you have an extra
25   level that you'd like to sell, but the customer has to
00253:01   enter a credit card, that could be a huge impediment to
02   the customer buying that extra level; whereas if it
03   just says, "Hey, click this button, and, for 99 cents,
04   you get another level," the user is much more likely to
05   click it. And Apple already has your credit card on
06   file, so it -- it really streamlines it. And it's a
07   huge win for the developer to have an easy mechanism
08   built in to -- to sell goods inside the app. So that
09   was -- that was the main reason we did it: To make it
10   much, much easier for developers to have another
11   revenue stream.
12   And, as the App Store -- as apps matured, we
13   just learned a lot more about different mechanisms for
14   how to help developers make money.
15   BY MR. EVEN:
16   Q.   Any other reasons that you recall, without
17   divulging any legal advice?
18   A.   Any other reasons for what?
19   Q.   For requiring the use of IAP for in-app sales of
20   digital goods.
21   A.   Well, another reason was to make it consistent
22   everywhere. So if users were to see a consistent
23   panel, they'd be more likely to accept that.
24   If, again, everything's different every time,
25   users might be afraid to click, you know, one -- one
00254:01   place and not another place, because they might think
02   they're going to get a credit-card form added. And so
03   if you had a standard panel across everything, that was
04   another.
05   Another we did have this 70:30 revenue split
06   in the store for sales. And it was to avoid apps from
07   trying to basically circumvent that by having a free
08   download that wasn't actually free. It was -- Apple
09   would pay for everything for the download, and then
10   they would charge the customer.

12. PAGE 254:11 TO 254:13 (RUNNING 00:00:06.133)

11   Q.   Any other reason?
12   A.   I'm sure there are more that I'm not thinking of
13   right now.

13. PAGE 255:18 TO 256:02 (RUNNING 00:00:38.050)

```
18          Do you recall the year that the App Store was
19   launched?
20   A.    2008.
21   Q.    And in 2008 what were your -- from a high level,
22   what were your general duties and responsibilities at
23   Apple?
24   A.    I ran all software for the iPhone OS, so iOS,
25   plus I was responsible for macOS 10 releases, and all
00256:01   design of software user interface design, and a set of
   02   other things.
```
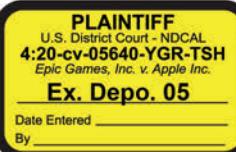
Epic Games, Inc. v. Apple Inc., No. 4:20-cv-05640-YGR-TSH (N.D. Cal.)

Deposition Designation of C.K. Haun (Vol. 1 & 2)
(January 13, 2021)
(January 14, 2021)

Time

Epic Games, Inc.'s Designations (Blue Highlight)	Apple Inc.'s Designations (Yellow Highlight)
21 minutes 46 seconds	1 minute 49 seconds

Haun, CK (Vol. 01) - January 13, 2021   1 CLIP (RUNNING 00:21:43.256)

---

32 SEGMENTS (RUNNING 00:21:43.256)

---

1. **PAGE 6:17 TO 6:19 (RUNNING 00:00:07.775)**

```
17                          C.K. Haun
18              having been first duly sworn, was
19              examined and testified as follows:
```

2. **PAGE 11:01 TO 11:05 (RUNNING 00:00:15.464)**

```
00011:01          So now I want to go to your starting to
     02   work at Apple.  You gave me the exact date although
     03   I think I forgot to write it down, but January 15,
     04   and that was 1980?
     05      A.    1990.
```

3. **PAGE 13:01 TO 14:05 (RUNNING 00:02:43.333)**

```
00013:01      Q.    Tell me about your career from then until
     02   around the period when Apple launched its App Store.
     03   Take me through the roles you played between that
     04   period and the time when Apple launched App Store.
     05      A.    I was a developer technical support engineer
     06   until 1994.  At that point I moved into the Macintosh
     07   system software engineering team and wrote and
     08   applied software fixes to various portions of the Mac
     09   operating system.
     10          In late 1995, I briefly left the company to
     11   join a startup; Be Incorporated.  It is B as in
     12   baker, E as in echo, incorporated.
     13          I worked there for roughly six months, left
     14   that company, returned to Apple.  At that point I was
     15   given responsibility for the engineering side of the
     16   Mac OS 8 system software release, so I managed the
     17   software engineering team for that operating system
     18   release.
     19          When that operating system release was
     20   completed, I worked on some of the design and
     21   foundational pieces of what would become Mac OS X,
     22   and in 1998 I was approached by the management of the
     23   Apple developer organization to take the director's
     24   job of developer technical support.  I accepted and I
     25   have had that role since then.
00014:01      Q.    What did that role entail?
     02      A.    My responsibilities at that point were to
     03   direct the team of developer technical support
     04   engineers in the appropriate areas to focus to assist
     05   our third-party developer community.
```

4. **PAGE 16:10 TO 16:19 (RUNNING 00:00:37.630)**

```
10      Q.    In your work and in Apple's work to support
11   developers, it supports both iOS developers and Mac
12   developers; is that correct?
13      A.    Yes.
14      Q.    Your team in particular provides support
15   both for Mac OS developers and iOS developers; is
16   that correct?
17      A.    Yes.
18      Q.    Has your team grown since App Store opened?
19      A.    No.
```

5. PAGE 17:13 TO 17:24 (RUNNING 00:00:41.803)

```
13      Q.    I'll move on.  So you're saying the work --
14   so the work to support an iOS developer is similar
15   to the work to support a Mac OS developer?
16      A.    Yes.
17      Q.    So over the time since App Store has
18   opened, the number of apps and the revenue Apple has
19   generated from the App Store has grown
20   substantially; is that correct?
21      A.    Yes.
22      Q.    But over that time, your team didn't grow
23   in size, correct?
24      A.    Yes.
```

6. PAGE 18:08 TO 18:11 (RUNNING 00:00:14.671)

```
08      Q.    Your team provides the same level of
09   support for a Mac OS developer that it provides for
10   an iOS developer?
11      A.    They are substantially identical efforts.
```

7. PAGE 25:01 TO 25:12 (RUNNING 00:01:05.810)

```
00025:01      Q.    Is there a process of signing Mac OS
02   applications?
03      A.    Yes.
04      Q.    How does that work?
05      A.    The process is again substantially similar
06   to the iOS process.  When a developer determines it's
07   in their desire to produce a Mac application, they
08   request a Mac developer identification certificate.
09   It is issued to them from our developer portal.  Then
10   during the process of building their Mac application,
11   that application is signed by our development tools
12   with that developer I.D. certificate.
```

8. PAGE 25:23 TO 26:05 (RUNNING 00:00:42.372)

```
23      Q.    What is the something I've heard referred
24   to as Mac OS notarization; how does that work?
25      A.    Notarization is a process where a Mac
00026:01   developer creates his or her application, signs it
02   with their developer I.D. certificate, and then
03   chooses to take an additional step of having Apple
04   software analyze and sign the application for
05   distribution outside of the Mac App Store.
```

9. PAGE 27:09 TO 27:13 (RUNNING 00:00:25.497)

```
09   by an app reviewer.  How long does an app reviewer
10   review an application?
11      A.    A typical review of a typical application
12   provided for consideration for distribution in our
13   online collection of apps takes minutes.
```

10. PAGE 28:21 TO 29:01 (RUNNING 00:00:21.126)

```
21      Q.    Is there a fee to be a member of the app
22   developer program?
23      A.    There is a fee to be a member of the Apple
24   Developer Program.
25      Q.    What's that fee?
00029:01      A.    Currently it is $99 in U.S. dollars.
```

11. PAGE 29:18 TO 30:03 (RUNNING 00:00:48.139)

```
18      Q.    In terms of technical support, there is
19   certain technical support benefits they receive as a
20   result of being a member?
21      A.    Yes.
```

```
     22      Q.   And what are those benefits?
     23      A.   The specific technical benefits are provided
     24  by my organization.  A developer, as part of their
     25  annual membership, receives the opportunity for no
00030:01  additional fee to consult with my engineers on two
     02  specific technical areas that they would like
     03  assistance, guidance or otherwise.
```

12. PAGE 31:12 TO 31:15 (RUNNING 00:00:12.314)

```
     12      Q.   There is an opportunity to get additional
     13  support, there is a payment they can make to get
     14  additional support; is that correct?
     15      A.   Yes.
```

13. PAGE 32:06 TO 32:07 (RUNNING 00:00:07.675)

```
     06      Q.   What is the charge for those additional --
     07      A.   $99 per incident.
```

14. PAGE 32:16 TO 32:24 (RUNNING 00:00:26.998)

```
     16      Q.   But all this support provided to members
     17  that develop native iOS apps are also provided to
     18  Mac OS developers, correct?
     19      A.   Substantially similar.  The technologies may
     20  be different.
     21      Q.   And it's provided even if the Mac OS
     22  developer distributes predominantly or even
     23  exclusively outside of the Mac App Store?
     24      A.   Correct.
```

15. PAGE 32:25 TO 33:17 (RUNNING 00:01:31.167)

```
     25      Q.   Why does Apple support developers who are
00033:01  developing apps that aren't distributed through the
     02  App Store?
     03      A.   Earlier in our conversation I described my
     04  understanding of the benefits of a third-party
     05  developer community to Apple.  The answer to your
     06  current question is similar to the answer I provided
     07  then.
     08           Distribution of Mac applications on other
     09  platforms, other distribution mechanisms, provides
     10  goods and services that consumers or businesses may
     11  choose to use.
     12      Q.   What's the benefit to Apple of that again?
     13      A.   The benefit to Apple is to have goods and
     14  services that a customer would like to use which
     15  encourages a customer to consider Apple products as
     16  products that they would choose to use in their
     17  business or personal lives.
```

16. PAGE 36:09 TO 36:19 (RUNNING 00:01:10.465)

```
     09      Q.   And what's the -- why does Apple provide
     10  for notarization of Mac iOS apps?  What's it trying
     11  to address?
     12      A.   One of the primary goals of application
     13  notarization is to provide our customers with
     14  information that Apple has done some level of
     15  inspection of a Mac application and we are
     16  communicating to that customer that we did not detect
     17  any flaws or potential privacy or security-related
     18  issues in that application, to the best of our
     19  ability at the time.
```

17. PAGE 37:05 TO 37:13 (RUNNING 00:00:51.979)

```
     05      Q.   Could Apple use a notarization system in
```

```
06  iOS?
07      A.   The technologies associated with a
08  notarization system -- I'm sorry, it's difficult to
09  answer that question because I'm not -- are you
10  asking if the software technology that we apply can
11  be applied to an iOS application?
12      Q.   Yes.
13      A.   Yes.   The answer is yes.
```

18. PAGE 142:20 TO 142:23 (RUNNING 00:00:10.156)

```
20              Exhibit 131 is an e-mail, and you're copied
21  on one of the e-mails in the chain and it addresses
22  the presence of a school shooting game on the App
23  Store.
```

19. PAGE 143:07 TO 143:13 (RUNNING 00:00:34.177)

```
07      Q.   Exhibit 131 describes the internal reaction
08  after certain individuals at Apple learned that
09  there was a school shooting game on the App Store
10  that had been posted soon after the Parkland
11  shooting, correct?
12      A.   I don't know if it was soon after Parkland
13  or not, but I agree with your other characterization.
```

20. PAGE 145:10 TO 145:16 (RUNNING 00:00:15.800)

```
10      Q.   The second sentence says:  "So far all the
11  evidence points to Armin was going too fast and
12  missed all the signs to reject these apps for 1.1 or
13  at least escalate."
14              Do you see that?
15      A.   It says "signals," not "signs," and I do see
16  that.
```

21. PAGE 146:03 TO 146:05 (RUNNING 00:00:07.576)

```
03      Q.   And it states it took a total of 32 seconds
04  to approve both apps.  Do you see that?
05      A.   I do see that.
```

22. PAGE 147:21 TO 147:25 (RUNNING 00:00:13.689)

```
21      Q.   Do you remember this incident involving
22  this school shooting app on the App Store?
23      A.   As I mentioned when you first brought it up,
24  I have a vague memory of it but not an in-depth
25  understanding.
```

23. PAGE 168:22 TO 169:14 (RUNNING 00:00:45.217)

```
22      Q.   What other devices other than the Mac do
23  you play games on, if any?
24      A.   A PlayStation 4 and an Xbox, whatever the
25  generation right before the one they just put out.  I
00169:01  can never remember Xbox's naming them schemes.
02      Q.   What about mobile devices; do you play
03  games on mobile devices?
04      A.   On my iPad.  Sorry, I forgot to mention
05  that.
06      Q.   Sounds like you have multiple game
07  consoles; is that right?
08      A.   Yes.
09      Q.   You also have a Mac on which you can play
10  games?
11      A.   Yes.
12      Q.   Why do you have multiple devices on which
13  to play games?
14      A.   Each device has different capabilities.
```

24. PAGE 170:13 TO 170:20 (RUNNING 00:00:24.903)

```
13      Q.    What about mobile devices; do they have any
14  capabilities compared with the other platforms?
15      A.    The definition of the platform, as you just
16  made, introduces the primary benefit, which is the
17  mobility.
18      Q.    So you view mobility as a reason why you
19  would have a mobile device to play games?
20      A.    Yes.
```

25. PAGE 170:23 TO 172:08 (RUNNING 00:01:45.229)

```
23            Is it important to you to have a device in
24  which you can play games that are mobile?
25      A.    Yes.
00171:01    Q.    Why is that important to you?
02      A.    There are times in my day-to-day life when I
03  would like to either clear my mind or enjoy myself by
04  playing a game, and I may not have access to my Mac
05  PlayStation, Xbox.  I may only have a mobile device
06  with me and that allows me to satisfy that desire.
07      Q.    And so that would include circumstances in
08  which you are away from home and therefore away from
09  those gaming consoles?
10      A.    Yes.
11      Q.    You keep the gaming consoles at home,
12  right?
13      A.    Yes.
14      Q.    They've got to be hooked up to your TV in
15  your living room or some other room in your home,
16  right?
17      A.    They have to be hooked up to a monitor, yes.
18      Q.    What about your Mac; do you have a desktop
19  or laptop?
20      A.    I have a laptop.
21      Q.    What about a laptop; do you bring that with
22  you when you're going about your daily business away
23  from home?
24      A.    Sometimes, yes.
25      Q.    Do you ever pull out your laptop and play
00172:01    games while you're away from home?
02      A.    No.
03      Q.    Why don't do you that if you have it with
04  you?
05      A.    In my opinion, the experience of playing
06  games away from a desk and a surface where I am able
07  to manipulate a mouse correctly, in my opinion, for
08  gaming, does not exist.
```

26. PAGE 185:12 TO 185:15 (RUNNING 00:00:07.352)

```
12      Q.    So sandboxing, there are more aspects
13  implemented on iOS than Mac OS?
14      A.    Yes.
15      Q.    Why is that?
```

27. PAGE 185:18 TO 186:09 (RUNNING 00:01:28.919)

```
18            There have been behaviors that have become
19  part of Mac OS from '82 to now that in some cases are
20  difficult to change without understanding all the
21  ramifications, and the ramifications can be rather
22  broad, not from necessarily from the operating
23  system's perspective, but from the perspective of Mac
24  developers who have 30-some-odd years of history of
25  knowing how certain things work, whether that
00186:01    knowledge is accurate or not.
02            When we developed iPhone OS, we did not have
```

```
03  an established base of either developer knowledge or
04  existing software applications that this intimate
05  knowledge of what iOS or iPhone OS did, so we could
06  begin a new platform with some enhanced goals and in
07  this case enhanced security in sandboxing
08  infrastructure without disrupting anything that had
09  happened in the past.
```

28. PAGE 187:01 TO 187:13 (RUNNING 00:00:36.056)

```
00187:01      Q.   Are there other benefits to sandboxing on
02  iOS?
03      A.   Obviously from a consumer focus, the
04  inability of application A to read the data created
05  by application B is a huge benefit to our customers.
06      Q.   So for example, my messenger app cannot
07  obtain data that my banking app may have; is that
08  right?
09      A.   That's correct.
10      Q.   That would be a problem because that might
11  compromise the safety of my personal information
12  that is stored by another app?
13      A.   Correct.
```

29. PAGE 188:09 TO 188:12 (RUNNING 00:00:18.836)

```
09      Q.   Are there important aspects of sandboxing
10  that have been implemented on iOS and not on Mac OS?
11      A.   With the release of our latest version of
12  Mac OS, I don't believe that is the case.
```

30. PAGE 238:07 TO 238:10 (RUNNING 00:00:01.621)

```
07           MS. COSCIA:  This is 140.
08           (The document referred to was marked as
09  Exhibit 140 for identification and is attached
10  hereto.)
```

31. PAGE 239:05 TO 239:08 (RUNNING 00:00:09.372)

```
05      Q.   I want to start at the top of this e-mail.
06  You wrote:  "We review, we do not test.  That's been
07  a guiding principal in App Review since we conceived
08  of it.
```

32. PAGE 239:17 TO 240:18 (RUNNING 00:02:20.135)

```
17      Q.   Thank you, understood:  "We review, we do
18  not test."   What's the difference between those?
19      A.   This is a particular -- as you can tell from
20  my emphasis in the first line of this e-mail, in the
21  software business, the word "test" has certain
22  implications to both software engineers, quality
23  assurance personnel and customers.
24           "Test" implies or outright infers that the
25  individual providing test has done a comprehensive
00240:01  use of the application, exercising most it not all of
02  the functionality of an application, and not only
03  testing all the functionality of the application, but
04  testing certainly much of the application under
05  different conditions with a different data and by
06  attempting to induce failure modes by, for example,
07  trying to run an application on a Windows PC that
08  does not have enough memory to do everything the
09  application wants and see how the application fares
10  under a test like that.  That's the commonly accepted
11  perception of what a test is.
12           Review as started by the iOS App Review team
13  is not testing.  As I've described earlier, we run
14  some automated tools on applications, and then a
```

94

15   reviewer will in general launch an app and do some
16   things with the app; not a comprehensive test.
17   That's why I made the emphasis here on that
18   differentiation.

<u>Haun, CK (Vol. 02) - January 14, 2021</u>   1 CLIP (RUNNING 00:01:52.196)

4 SEGMENTS (RUNNING 00:01:52.196)

1. PAGE 276:22 TO 276:25 (RUNNING 00:00:14.632)

```
22      Q.   Okay.  When you were running the App Store,
23  on average how long did it take a reviewer to do the
24  human review for an app coming into the App Store?
25      A.   Typically three to seven minutes.
```

**2. PAGE 289:21 TO 289:22  (RUNNING 00:00:00.540)**

```
21          (Exhibit 144 was marked for identification
22      and is attached hereto.)
```

3. PAGE 290:11 TO 291:07 (RUNNING 00:01:10.533)

```
11          And you are shown as a recipient of at least
12  one of the e-mails in the thread?
13      A.   Yes.
14      Q.   Okay.  Does this refresh your recollection
15  that XcodeGhost became a problem sometime around
16  September 17th, 2015?
17      A.   Yes.
18      Q.   Okay.  And in it, in this thread, you are
19  asked by Craig Bradley (as read):
20              This all seems very technical to
21          me, but the comment that "infected
22          apps successfully passed app review
23          concerns me, is this something we
24          should worry about or actively scan
25          for during app review."
00291:01          Do you see where I'm reading?
02      A.   Yes.
03      Q.   Okay.  So first question:  Who is Mr.
04  Bradley?
05      A.   Craig Bradley manages our worldwide
06  developer relations activities in -- at that point,
07  the southeast Asia and China markets.
```

4. PAGE 291:16 TO 291:20 (RUNNING 00:00:26.491)

```
16      Q.   Well, both:  What is XcodeGhost?
17      A.   XcodeGhost was a exploit which fooled our
18  tool chain into including an inaccurate modified
19  version of some SDK, software development kit,
20  libraries.
```
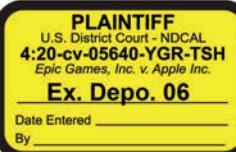
<u>*Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640-YGR-TSH (N.D. Cal.)</u>

Deposition Designation of Eric Friedman (Vol. 1 & 2)
(February 1, 2021)
(February 2, 2021)

Time

Epic Games, Inc.'s Designations (Blue Highlight)	Apple Inc.'s Designations (Yellow Highlight)
21 minutes 8 seconds	15 minutes 22 seconds

Friedman, Eric (Vol. 01) - February 1, 2021   1 CLIP (RUNNING 00:35:36.320)

---

62 SEGMENTS (RUNNING 00:35:36.320)

---

1. PAGE 12:14 TO 12:16 (RUNNING 00:00:06.525)

```
14                    ERIC FRIEDMAN,
15     having been first duly sworn, was examined and
16                  testified as follows:
```

2. PAGE 38:21 TO 38:22 (RUNNING 00:00:07.005)

```
21     Q   When did you join Apple?
22     A   July of 2012.
```

3. PAGE 39:05 TO 39:19 (RUNNING 00:00:39.430)

```
05     Q   Okay.  And what role did you have at Apple
06  when you joined?
07     A   Very briefly, software developer.
08     Q   And what were you very briefly developing?
09     A   commerce systems for at the time what was
10  called the iTunes Store.
11     Q   Okay.  At that time, the iTunes Store sold
12  apps as well as movies and music; is that right?
13     A   That's right.
14     Q   Okay.  And you say you developed e-commerce
15  systems.
16         What would those systems do within the iTunes
17  Store?
18     A   Well, I was specifically responsible for the
19  fraud engineering systems.
```

4. PAGE 49:13 TO 49:17 (RUNNING 00:00:09.651)

```
13     Q   Okay.  Has your role changed since then?
14     A   Yes.
15     Q   How has it changed?
16     A   We took on responsibility for other kinds of
17  abuse.
```

5. PAGE 50:01 TO 50:15 (RUNNING 00:01:12.569)

```
00050:01    Q   Okay.  What kind of -- what other kinds of
02  abuse did you take the responsibility on for?
03     A   Sure.  And so I'm not -- in my answer, I'm
04  not going to distinguish between the things that
05  came from iCloud and the things that came in account
06  security.
07         So there was an area of discovery abuse that
08  we became responsible for.  I mentioned account
09  security.  And then at a later point, iMessage spam;
10  at a later point, mail spam, various other kinds of
11  spam in the iCloud infra-system, you know, phishing
12  virus, phishing in general, I should say.  We did a
13  number of efforts that were -- it was broadly about
14  identifying abuse of behavior across services and
15  developer fraud.
```

6. PAGE 50:16 TO 51:08 (RUNNING 00:01:32.110)

```
16     Q   What is developer fraud?
17     A   Sure.
18     Q   Sorry.
```

```
19     A    That's okay.  I was just about to answer that
20  question, so good timing.  So there are several
21  kinds, but broadly speaking, it comes down to
22  knowing who we're doing business with and making
23  sure that those purposes are -- are not -- the --
24  the privileges are not being misused for illicit
25  distribution and for illegal activity like money
00051:01  laundering.
02          And then -- what was I going to say about
03  developer fraud?  There are compliance elements to
04  it referring to OFAC.  It -- with partners, extends
05  it to the domains of malware and -- I think that's
06  a -- a general view of the landscape.  I'm sure if
07  you have more precise questions, we'll be able to
08  delve into that.
```

7. PAGE 57:20 TO 58:09 (RUNNING 00:00:57.657)

```
20     Q    Let's talk about malware.  How -- what do you
21  consider malware to be?
22     A    I consider malware to be software which
23  deceives an end user as to its function.
24     Q    And how does Apple prevent customers from
25  obtaining malware?
00058:01  A    So in my domain, what we focus on is
02  preventing illicit distribution.
03     Q    Well, what do you mean by illicit
04  distribution?
05     A    Illicit -- sorry, distribution outside of the
06  App Store.
07     Q    So do you perform any other function in order
08  to prevent customers from obtaining malware?
09     A    No.
```

8. PAGE 58:10 TO 58:13 (RUNNING 00:00:06.771)

```
10     Q    Okay.  What about Apple?  Does Apple perform
11  any other function that prevents customers from
12  obtaining malware?
13     A    Yes.
```

9. PAGE 59:10 TO 59:19 (RUNNING 00:00:23.962)

```
10     Q    Okay.  Does your team have a name?
11     A    Fraud engineering, algorithms and results --
12  and risk.  I'm sorry, risk.  We like --
13     Q    Is that sometimes abbreviated FEAR?
14     A    That's right.
15     Q    Do people pronounce it "fear" within Apple?
16     A    They pronounce it "FEAR," uh-huh.
17     Q    Okay.  And you -- are you the leader of that
18  group?
19     A    Yes, I am.
```

10. PAGE 63:06 TO 63:08 (RUNNING 00:00:10.520)

```
06     Q    In performing your role, have you had to
07  interact with App Review within the App Store?
08     A    Yes, I do interact with App Review.
```

11. PAGE 68:05 TO 68:14 (RUNNING 00:00:34.993)

```
05     Q    Okay.  Sorry.  Let's start with iOS first.
06          How does your team prevent the illicit
07  distribution of apps on iOS?
08     A    Sure.  So we run several what we call
09  crawling systems to identify illicit distribution
10  activity.
11     Q    Okay.  What are the systems crawling?
12     A    The internet.
```

```
13    Q    And what are they looking for?
14    A    Distribution outside the App Store.
```

12. PAGE 77:11 TO 77:12 (RUNNING 00:00:00.915)

```
11          (Exhibit 250 was marked for identification
12          and is attached hereto.)
```

13. PAGE 81:18 TO 81:25 (RUNNING 00:00:34.438)

```
18    Q    Are you aware of developers requesting
19  five-star ratings?
20    A    Yes.
21    Q    Okay.  Is that considered abuse?
22    A    Well, again, I am not responsible for -- for
23  defining that exactly, but I refer to
24  Mr. Shoemaker's message above where he says a
25  request for five-star witness causes rejection.
```

14. PAGE 82:01 TO 82:04 (RUNNING 00:00:10.780)

```
00082:01    Q    Okay.  So that's something that, in your
     02  understanding, should not have been permitted by App
     03  Review?
     04    A    Correct.
```

15. PAGE 82:05 TO 83:03 (RUNNING 00:00:56.576)

```
05    Q    And after Mr. Shoemaker emails you providing
06  that information, you write an email starting with
07  (as read):
08          "Pedraum, when can we talk about
09          this?"
10    A    Uh-huh.
11    Q    Who was -- was Pedraum that you're addressing
12  there?
13    A    Pedraum Pardehpoosh at the time was -- I
14  don't remember the precise role, but he was on the
15  business side of App Store and so was someone we
16  conferred with about what the business rules should
17  be for the discovery features we were attempting to
18  protect --
19    Q    Okay.
20    A    -- discovery experiences.  Excuse me,
21  experiences.
22    Q    Understood.  You write (as read):
23          "Pedraum, when can we talk about
24          this?  App Review is bringing a
25          plastic butter knife to a gun
00083:01          fight."
     02          Do you see that?
     03    A    I do.
```

16. PAGE 89:02 TO 89:05 (RUNNING 00:00:07.746)

```
02    Q    And, Mr. Friedman, if you could access
03  Exhibit 251 and take a minute or two to read that,
04  please, and let me know when you've finished.
05    A    All right.
```

17. PAGE 93:13 TO 93:19 (RUNNING 00:00:22.224)

```
13    Q    You start "Regarding review processes,"
14  colon.
15          Do you see that?
16    A    Uh-huh.
17    Q    You're referring to App Review processes,
18  right?
19    A    Looking at the final sentence, yes.
```

18. PAGE 94:09 TO 94:23 (RUNNING 00:00:32.897)

```
09     Q   Let me -- let me repeat again (as read):
10         "Please don't ever believe that they
11         accomplish anything that would deter
12         a sophisticated attacker."
13         Do you see that?
14     A   I do.
15     Q   Is that an accurate assessment of App Review
16 by you at the time?
17     A   Well, I think I spoke generally about review
18 processes, but yes, this one is in the context of
19 App Review.
20     Q   Okay.  And you say (as read):
21         "I consider them a wetware rate
22         limiting service and nothing more."
23     A   Uh-huh.
```

19. PAGE 95:07 TO 95:11 (RUNNING 00:00:09.070)

```
07         Do you have an understanding of what wetware
08 is and -- and how you used it there?
09     A   Yeah, uh-huh.
10     Q   Okay.  What is it?
11     A   It's what's up here, the human brain.
```

20. PAGE 97:04 TO 97:16 (RUNNING 00:00:20.159)

```
04     Q   Okay.  You go on to say (as read):
05         "Yes, they sometimes catch things."
06         Do you see that?
07     A   Uh-huh.
08     Q   Implying sometimes they don't catch things;
09 is that -- isn't that right?
10     A   Yeah, I think that's correct.
11     Q   Okay.  (As read):
12         "But you should regard them as
13         little more than the equivalent of
14         the TSA at the airport."
15         Do you see that?
16     A   I do.
```

21. PAGE 97:20 TO 97:25 (RUNNING 00:00:16.493)

```
20         Is it fair to say you didn't have a very high
21 opinion of what the TSA at the airport could
22 accomplish?
23     A   I -- yeah, I think it's been proven that the
24 TSA at the airport is not able to deflect any --
25 deflect sophisticated attackers.
```

22. PAGE 98:01 TO 98:09 (RUNNING 00:00:14.307)

```
00098:01   Q   Okay.  You say --
02     A   And they are under pressure to move people
03 through.
04     Q   Understood, understood.  Much like App
05 Review, right?
06     A   (No audible response.)
07     Q   Is that a yes?  You --
08     A   Oh, I'm sorry.  I'm nodding.  Yes, much like
09 App Review, yes.
```

23. PAGE 99:02 TO 99:24 (RUNNING 00:01:29.525)

```
02     Q   Okay.  And I -- I asked you -- when I was
03 asking questions, I said we could focus first on
04 January 2016, but I would be interested to know how
05 things have changed since January 2016.
06         Could you describe that for me, please.
```

101

```
07     A    Well, as I mentioned, there have been a lot
08  of investments in tooling and systems and automation
09  to help them.  So, you know, the -- fundamentally,
10  the App Review is governing its activity according
11  to a set of guidelines and in transparency about
12  those guidelines, and they do catch a lot of abuse.
13  And their ability to catch abuse has been augmented
14  by -- by these investments.
15         And there have been innovations like the one
16  that I described -- App Attest and Device Check.
17  Perhaps those are the ones I'm thinking about right
18  now -- that exist in this instance to defend a
19  legitimate developer against someone who is -- is
20  abusing a customer -- deceiving the customer.
21     Q    Okay.
22     A    So it's a multi -- you know, a lot has
23  changed since -- in the last five years, and six
24  days.
```

24. PAGE 100:07 TO 100:10 (RUNNING 00:00:09.539)

```
07     Q    And, Mr. Friedman, if you could open what
08  we've marked as Exhibit 252, take a couple minutes
09  to read it, and then let me know when you've
10  finished.
```

25. PAGE 100:11 TO 100:15 (RUNNING 00:00:13.893)

```
11     A    Okay, Mr. Byars.
12     Q    Okay.  Who is the person you are exchanging
13  emails with in this chain?
14     A    Herve Sibert is on my team, and he runs the
15  FIRE team of which you asked earlier.
```

26. PAGE 105:16 TO 105:25 (RUNNING 00:00:34.130)

```
16     Q    Okay.  Is Mr. Sibert -- is he referring to an
17  app that appears to be a calculator when launched
18  but is actually -- performs some other function?
19     A    Well, I don't -- you know, the -- there's
20  what's said, and then there's what -- the referent
21  of what's said is.  And so I don't -- you know,
22  you'd have to ask Mr. Sibert what the referent was.
23  But since I don't recall it, I'm not -- I'm not able
24  to offer you an opinion about what that specific app
25  was or did.
```

27. PAGE 106:01 TO 106:15 (RUNNING 00:00:46.148)

```
00106:01     Q    Okay.  Sitting -- sitting here now, reading
02  this email, what do you understand him to be saying?
03         What kind of app is he describing?
04     A    Okay.  That's a question I can answer.  So --
05     Q    Okay.
06     A    -- as I understand this, what he's describing
07  is a pattern where an app is submitted to App Review
08  and its behavior changes after it has gone through
09  App Review and is being distributed.  And he is
10  specifically suggesting that such an app might be
11  one that you would not expect to draw a lot of
12  attention, a calculator.  You know, people have
13  calculators have -- on their phones already.  And
14  yet, the app draws tremendous attention, hence,
15  loads of downloads.
```

28. PAGE 111:02 TO 111:12 (RUNNING 00:00:21.862)

```
02     Q    Okay.  Thank you.  And just to finish this --
03  this email that we were just reading, you write or
04  wrote (as read):
```

```
05          "They are more like the pretty lady
06          who greets you with a lei at the
07          Hawaiian airport than the drug
08          sniffing dog who, well, never mind. ;)"
09          Do you see that?
10     A    I do.
11     Q    And by that, you mean App Review, right?
12     A    In this context, yes.
```

29. PAGE 111:13 TO 111:24 (RUNNING 00:00:42.315)

```
13     Q    Okay.  Is this consistent with your opinion
14   at the time that App Review was primarily designed
15   to welcome developers and their apps rather than to
16   keep harmful material out?
17     A     They are absolutely enforcing the guidelines
18   of the store to the best of their ability, and the
19   guidelines of the store prohibit the publication of
20   harmful material.  So they're absolutely concerned
21   with that and with investments from, you know, the
22   broad range of talent and expertise.  Around Apple,
23   they have gotten better, and they continue to get
24   better in fulfilling that function.
```

30. PAGE 112:05 TO 112:09 (RUNNING 00:00:14.610)

```
05     Q    -- which is, just looking at this sentence,
06   was this consistent with the opinion you held at the
07   time that App Review was more about welcoming
08   developers and their apps into the App Store than
09   about keeping out harmful material?
```

31. PAGE 112:14 TO 112:16 (RUNNING 00:00:05.756)

```
14          THE WITNESS:  Mr. Byars, there's a premise in
15   your statement that those two things are mutually
16   exclusive.  And they are not.
```

32. PAGE 113:08 TO 114:19 (RUNNING 00:01:48.720)

```
08     Q    Okay.  Well, if -- if App Review is enforcing
09   guidelines, is that more like a pretty lady who
10   greets you with a lei at the Hawaiian airport, or is
11   that more like a drug sniffing dog?
12     A    I think that that statement was glib and
13   unfair and not sufficiently nuanced to describe all
14   the functions that they perform.
15     Q    Okay.  So you've changed your opinion since
16   this email about -- about App Review?
17     A    Yes.
18     Q    Okay.
19     A    Certainly -- well, let me say this another
20   way.  Certainly that -- that analogy is not what I
21   consider to be the case about App Review.
22     Q    Sitting here today, this analogy you -- you
23   believe is no longer accurate, whether or not you
24   believed it was accurate at the time; is that
25   your --
00114:01   A    Correct.
02     Q    -- testimony?
03     A    That's correct.
04     Q    Okay.  When did you change your opinion?
05     A    I can't point you to a specific date but, you
06   know, as I've discussed more the investments that
07   have been made in supporting App Review, I think
08   that, you know, it's been a -- a journey for me and
09   reflects investments from Apple that, you know,
10   we've been able to participate in and support.
11     Q    And those investments have been made after
```

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```
12   this email and after this chain of emails, which
13   means it would be in the last couple years, right?
14      A    Well, there are investments along the way at
15   every point.  So I don't know -- again, as I -- as I
16   said, it was a journey for me.  So at this time, I
17   may not have had full understanding of everything
18   that they're doing.  Even as of today, I don't have
19   full understanding of everything that they're doing.
```

33. PAGE 115:05 TO 115:06 (RUNNING 00:00:05.950)

```
05      Q    Mr. Friedman, I'm going to ask you to take a
06   look at what we've now marked as Exhibit 253.
```

34. PAGE 115:15 TO 115:18 (RUNNING 00:00:22.994)

```
15      Q    Okay.  Do you recall the purpose of creating
16   this attached document?
17      A    It appears to be to enable informed
18   decision-making on an identified abuse.
```

35. PAGE 115:23 TO 116:12 (RUNNING 00:00:58.148)

```
23      Q    Okay.  Great.  Do you recall what that abuse
24   was?
25      A    Yeah.  So there was a problem at the time --
00116:01   I guess the time frame is not one I have a lot of
02   precision about -- where there were ads showing up
03   in the store that were promoting virus detection
04   software on the iPhone, which is nonsensical.
05   There's no such -- you know, there's no need for
06   that.  There's no such thing as that.
07           And so I recall being asked about this by the
08   head of SEAR and -- and so, you know, we took a look
09   at that and, apparently, drafted some -- some
10   proposed mitigations so that an informed decision
11   can be made about that kind of deceptive user
12   visible information.
```

36. PAGE 118:06 TO 119:09 (RUNNING 00:01:38.277)

```
06           So I need to revise my earlier remarks.
07      Q    Okay.
08      A    So earlier, I spoke about the -- about the
09   virus -- a virus scanner issue, but the median
10   article actually covers a number of other abuses
11   that were -- that are described here.
12           And as I recall the specific -- I mean, the
13   virus is certainly covered in here, but the specific
14   thing that was associated with that was the -- on --
15   where did you say the pages are numbered?
16      Q    At the bottom.  You can use --
17      A    Oh, I see.
18      Q    -- what we call a Bates number.
19      A    Is that in the lower right-hand corner?
20      Q    That's right.
21      A    Okay.  So if I look at the page ending in
22   7762 --
23      Q    Uh-huh.
24      A    -- there's an "Article highlights."
25      Q    Uh-huh.
00119:01   A    So the thing that was specifically behind the
02   $80,000 business was in the second-from-right column
03   where you see the "Touch ID High value in-app
04   purchase."
05           So that -- that aspect caught attention, and
06   then these other items emerged, so...
07      Q    So that developer was offering a subscription
08   to something for 99.99, right?
```

```
        09     A    Every seven days.
```

37. PAGE 120:02 TO 120:03 (RUNNING 00:00:04.649)

```
        02     Q    And if I could please direct your attention
        03   to the page ending in 763.
```

38. PAGE 120:11 TO 120:14 (RUNNING 00:00:09.056)

```
        11     Q    Okay.  So -- and -- and is this your -- in
        12   your understanding, is this sort of a summary of
        13   what happened with this app that this presentation
        14   is discussing?
```

39. PAGE 120:15 TO 120:21 (RUNNING 00:00:27.603)

```
        15     A    I don't know if this is what this specific
        16   app did.
        17     Q    Okay.  What is the timeline laid out here if
        18   not about a specific app?
        19     A    It may be an overlay of the things that one
        20   could do to achieve this kind of abuse without
        21   necessarily having to do all of them.
```

40. PAGE 120:22 TO 121:23 (RUNNING 00:00:48.907)

```
        22     Q    Okay.  So, for example, number 1 says (as
        23   read):
        24          "Developer submits app with
        25          prohibited terms, rejected twice."
  00121:01          Do you see that?
        02     A    Uh-huh.
        03     Q    Are you aware of apps having been submitted
        04   more than once for App Review and having been
        05   rejected repeatedly?
        06     A    Yes.
        07     Q    Okay.  Then it says (as read):
        08          "Developer removes" -- I'm looking
        09          at number 2 now.
        10          (As read):
        11          "Developer removes problem terms,
        12          passes review but with problematic
        13          content."
        14          Are you aware of examples of a developer
        15   resubmitting a previously rejected app including
        16   remaining problematic content?  Are you aware of
        17   that happening before?
        18     A    Yes.
        19     Q    And there have been circumstances under which
        20   the app has, in fact, passed review after having
        21   been previously rejected for having problematic
        22   content?
        23     A    Yes.
```

41. PAGE 121:24 TO 122:06 (RUNNING 00:00:13.714)

```
        24     Q    Okay.  Is that a big problem in your view?
        25     A    I don't have any metrics about that.
  00122:01     Q    I'm sorry.  You cut -- you cut out very
        02   briefly.
        03     A    Oh.
        04     Q    If you wouldn't mind repeating the answer.
        05     A    Sure.  I don't have any metrics about that
        06   with which to tell you whether it's a big problem.
```

42. PAGE 122:21 TO 123:23 (RUNNING 00:01:03.522)

```
        21          Number 4 says (as read):
        22          "Users gulled into subscribing with
        23          aggressive call to action."
```

```
          24        Do you see that?
          25    A   Uh-huh.
00123:01        Q   That's what we were just referring to.  I
          02  think you said -- I'm sorry.  Remind me of the term
          03  you used.
          04    A   Misleading subscriptions or misleading subs.
          05    Q   Okay.  That's -- that's referring to -- to
          06  that number 4, right?
          07    A   Yes.
          08    Q   Okay.  And then it says, number 5 (as read):
          09        "Conversion rate sufficient to enter
          10        Top Grossing chart."
          11        Do you see that?
          12    A   I do.
          13    Q   What does this mean by conversion rate?
          14    A   So from discovery to -- through to purchase.
          15    Q   So this refers to the rate of people who
          16  actually subscribed to that subscription?
          17    A   Download and subscribe.
          18    Q   Okay.  And then number 5 is saying the rate
          19  was so high, this app was one of the top grossing
          20  apps in the store, right?
          21    A   The terminology in there is a little -- is a
          22  little confusing, but the app generated enough
          23  revenue that it became top grossing.
```

43. PAGE 123:24 TO 124:16 (RUNNING 00:00:48.460)

```
          24    Q   Okay.  It made so much money that it was one
          25  of the top grossing apps in the store, right?
00124:01    A   So as I said earlier, I don't know if this
          02  is -- is true of that specific app, whether it
          03  actually showed up in top grossing or not.  But as
          04  the article says, it's $80,000 in some -- some time
          05  period.  It definitely made, you know, significant
          06  revenue.  I can't tell you --
          07    Q   Okay.
          08    A   Oh, yeah, it was position X in the top
          09  grossing chart.  I -- I don't have that information.
          10    Q   Are you aware of there being -- putting this
          11  one -- this example aside, other fraudulent subs
          12  that generated a lot of money?
          13    A   Define a lot of.
          14    Q   Well, significant amounts.
          15    A   You and I may have different opinions about
          16  what a significant amount is.
```

44. PAGE 134:25 TO 135:01 (RUNNING 00:00:03.595)

```
          25        MR. BYARS:  Thank you.  And for the record,
00135:01  this is marked as Exhibit 254.
```

45. PAGE 136:02 TO 136:18 (RUNNING 00:00:36.097)

```
          02    Q   Okay.  Let's look at the email that's next
          03  up, the -- the most immediate email, that starts
          04  with --
          05    A   8:44 a.m.?
          06    Q   That's right.
          07    A   Okay.
          08    Q   So you say (as read):
          09        "Yes, the ability to pay for
          10        promotion would be awesome."
          11        So are you referring there to developers
          12  paying Apple for promotion within the App Store?
          13    A   Yes.
          14    Q   You say (as read):
          15        "We've floated it several times as
```

```
16        the way to end chart gaming."
17        Do you see that?
18     A  Uh-huh.
```

46. PAGE 136:19 TO 137:07 (RUNNING 00:00:34.410)

```
19     Q  To whom had you floated this proposal several
20  times?
21     A  I definitely don't remember that.
22     Q  Okay.  You don't recall ever floating
23  developer's ability to pay for promotion in the App
24  Store?
25     A  That's not what I said.  I don't remember to
00137:01  whom or --
02     Q  Okay.  Do you --
03     A  -- if I floated it.
04     Q  Okay.  But do you remember floating that
05  proposal?
06     A  Well, clearly, I said that -- that we've done
07  it, but I don't remember doing it.
```

47. PAGE 137:11 TO 137:17 (RUNNING 00:00:21.312)

```
11        Chart gaming, what does that mean?
12     A  Manipulation of inputs to the charting level
13  for them to appear more popular.
14     Q  Okay.  And that was that kind of abuse that
15  you said that your team was tasked with identifying
16  and -- and preventing, right?
17     A  That's right.
```

48. PAGE 138:18 TO 138:24 (RUNNING 00:00:07.935)

```
18     Q  Okay.  You say (as read):
19        "If people are willing to pay
20        'marketing companies' (bot nets) to
21        gain position, why don't we just let
22        them pay us to gain position?"
23        Do you see that?
24     A  Uh-huh.
```

49. PAGE 138:25 TO 139:09 (RUNNING 00:00:34.460)

```
25     Q  So are you proposing that instead of
00139:01  developers paying bot nets to engage in chart abuse,
02  they instead just give that money to Apple to gain
03  position on the charts?
04     A  No.  I'm suggesting that we make a -- a
05  clearer distinction between incentivized placement
06  and -- and organic placement, which, you know,
07  there's a fairly common -- fairly commonly
08  distinction made in search.  If you've used major
09  search engines, I'm sure you're aware of them.
```

50. PAGE 140:01 TO 140:11 (RUNNING 00:00:38.304)

```
00140:01  Q  Okay.  At this time, users of the App Store
02  couldn't rely on organic placement to determine
03  which apps were popular, right?
04     A  That's a very sweeping statement.  I -- I
05  don't think I can answer yes or no to that.  I think
06  that in some context where we had a -- where we
07  missed a signal, where we were behind on adaptation,
08  then -- then there might have been -- there -- there
09  can be periods of unreliability, but, you know, it's
10  something that we actively fought and continue to
11  fight.
```

51. **PAGE 140:15 TO 141:10 (RUNNING 00:01:08.011)**

```
         15          Were you at a period of unreliability around
         16   the time of this email?
         17      A   I don't think I used the word
         18   "unreliability."
         19      Q   You said there can be periods of
         20   unreliability.
         21          Were you in such a period at this time?
         22      A   I don't -- I wouldn't describe it as a period
         23   so much as, you know, particular attacks.  A new
         24   attack vector or an adaptation comes up, and then
         25   we -- we adjust that.  But, you know, it's a fast
   00141:01   ecosystem, so it's not that the entire thing becomes
         02   tainted all at once.  You know, there might be an
         03   outbreak in a particular area --
         04      Q   Okay.  So --
         05      A   -- but in this conversation -- in this
         06   conversation, we're dialoguing about news from --
         07   from something in Google Play, which is not the same
         08   thing as -- which doesn't tell me that there was a
         09   moment right then where the chart problem was -- was
         10   flaring up anymore.
```

52. **PAGE 141:12 TO 142:03 (RUNNING 00:00:33.438)**

```
         12          The third paragraph of the email on the
         13   bottom of the page starts (as read):
         14          "I've actually" --
         15      A   On the penultimate page?  Oh, yeah, "I've
         16   actually."  Okay.
         17      Q   On the first page (as read):
         18          "I've actually managed to convince
         19          myself that our App Store charts
         20          aren't really a discovery tool at
         21          all.  Yes, they do drive some
         22          conversions, but that is (I suspect
         23          and haven't verified) mostly the
         24          bots and/or humans responding to
         25          incentivize" -- sorry, "incentives
   00142:01          from promotional companies."
         02          Do you see that?
         03      A   Uh-huh.
```

53. **PAGE 142:04 TO 142:10 (RUNNING 00:00:28.040)**

```
         04      Q   So was it your view that the charts in App
         05   Store were not performing a discovery function
         06   around the time of this email?
         07      A   So my remarks here are actually not about
         08   whether there was a flog problem or not.  It's about
         09   whether in an app economy, a popularity chart is --
         10   is a really great way to discover content.
```

54. **PAGE 143:11 TO 144:22 (RUNNING 00:01:44.380)**

```
         11      Q   Okay.  So your testimony is that you did not
         12   think there was a problem of bots and/or humans
         13   responding to incentives that were influencing the
         14   app charts?
         15      A   That is not what I said.
         16      Q   Okay.
         17      A   You asked me --
         18      Q   Now what --
         19      A   You asked me to explain why I thought app
         20   charts aren't a -- aren't really a discovery tool at
         21   all.  And as I explained in the third and fourth
         22   sentence, I go on to say that a chart -- and this is
         23   independent of -- of whether there's fraud or not
```

```
24  that puts YouTube and Flight Pilot Simulator 3D in
25  the same list isn't useful to a human shopper.
00144:01  Sure, you might buy both, but that decision won't be
02  motivated by their popularity relative to one
03  another.
04      So if I'm going in and I'm looking at a chart
05  and it shows me YouTube and, oh, yeah cool, I can --
06  I can, you know, watch videos, I'm not going to look
07  at the fact that it's above or below a flight
08  simulator in making my decision on whether to pick
09  YouTube.  I want YouTube.
10      So unlike a search where I'm interested in a
11  category and I go in and I say, oh, I'm interested
12  in photo editing apps and the -- and the recall of
13  the algorithm comes back with all -- all of the
14  photo editing apps.  And then I might be -- I might
15  be influenced by what's more popular than another.
16      But a chart which is primarily based off of
17  purchases, sales activity makes a lot more sense in
18  music where people are interested in what's the hot
19  song of the summer.  But in my opinion, it doesn't
20  make sense -- my opinion at the time, certainly, it
21  doesn't make sense where people are being driven by
22  function.
```

55. PAGE 144:24 TO 145:11 (RUNNING 00:00:16.557)

```
24          I want to go to the -- the top email on the
25  page.
00145:01  A   Okay.
02  Q   It -- it starts (as read):
03      "The devs would love it."
04  A   Uh-huh.
05  Q   (As read):
06      "The problem is Tim" -- "the problem
07      is that Tim is telling the world
08      that we make great products without
09      monetizing users."
10      Who is the Tim there?
11  A   Tim Cook.
```

56. PAGE 145:12 TO 147:01 (RUNNING 00:02:01.282)

```
12  Q   Okay.  So in -- in your recollection, he had
13  been conveying that message to people?
14  A   I don't think he would use those words.  I
15  don't think I recall him using those words.  That's
16  my -- that's, apparently, how I summarized it.
17  Q   Okay.  Fair enough.
18  A   So --
19  Q   Yep.  Then you say (as read):
20      "Ads would be weirdly at odds with
21      that."
22      Why would ads be weirdly at odds with that?
23  A   Well, I think we need to unpack what "that"
24  is.
25  Q   Are you -- are you not referring to the
00146:01  message that Mr. Cook was telling the world when you
02  said (as read):
03      "Ads would be weirdly at odds with
04      that"?
05  A   Well, again, this is -- this was my -- my
06  opinion at the time, but as I read this, we -- you
07  know, Apple absolutely and unequivocally has taken
08  the stance that -- that we are -- you know, that we
09  do not generate revenue off of -- off of our users.
10      Our users are not the product, right?  The
11  devices and software that we make is the product.
```

```
12   And so -- hmmm, I'm thinking about this.
13        I don't think I would -- I would view this in
14   the same way today as the statement looks -- looks
15   now, because if I look at this today, the question
16   is, to me, does ad platforms enable developers and
17   users to find one another?
18        And I think that it does, because there's
19   transparency that this appears to be relevant to
20   what you're seeking and was paid for.  So it's
21   transparent that -- that it was done in exchange
22   for -- for compensation.  So, in other words, I
23   would --
24   Q    Okay.
25   A    Not write this.  I -- I consider what I wrote
00147:01  here to be incorrect.
```

57. PAGE 148:01 TO 148:11 (RUNNING 00:00:26.216)

```
00148:01  Q    I want to talk about a concept and see if you
02   understand what I'm saying, black market app stores.
03   A    Uh-huh.
04   Q    Is that a concept you're familiar with?
05   A    It is.
06   Q    Okay.  What are those?  Could you describe
07   them.
08   A    Yeah, it's a -- a center for illicit
09   distribution.  We have several different names that
10   we use for them, but it's a vehicle for achieving
11   illicit distribution.
```

58. PAGE 148:12 TO 148:23 (RUNNING 00:00:56.470)

```
12   Q    Okay.  And how are you aware of these black
13   market app stores?
14   A    How am I aware of them?  Well, we see them in
15   our -- in our program to curtail illicit
16   distribution.  They, at various times, have been --
17   well, they're -- they're readily visible on the
18   internet when -- when our crawlers find them.
19        Some of them have very public profiles.
20   In -- in China, for example, I've heard about them
21   in the news.  Some of them have -- I lost my train
22   of thought -- yeah, anyway, let's stop there.
23   They're -- you know, they're not hiding.
```

59. PAGE 148:24 TO 149:15 (RUNNING 00:01:05.829)

```
24   Q    Okay.  Fair enough.  Do you know why a user
25   might choose to use a black market app store rather
00149:01  than the legitimate Apple App Store?
02   A    Sure, to obtain illicit -- illicit content.
03   Q    Is that the only reason somebody might use a
04   black market app store?
05   A    Well, I can tell you that at least one of
06   the -- oh, yeah, sorry.  Another reason would be
07   historically -- not really the case anymore -- that
08   in China, when we first started looking at this
09   problem, the black market app stores had a couple of
10   things going wrong.
11        One had to do with performance that appeared
12   to be advantageous, and the other had to do with
13   that they had better -- better penetration of -- of
14   payment instruments that were popular with Chinese
15   customers at that time.
```

60. PAGE 155:05 TO 155:06 (RUNNING 00:00:02.560)

```
05        MR. BYARS:  And for the record, this is
06   Exhibit 255.
```

61. PAGE 155:25 TO 156:09 (RUNNING 00:00:16.918)

```
         25     Q    So you -- you write in your first email (as
00156:01     read):
         02          "Hi Ben, I'm kicking up a lot of
         03          dust over here about the black
         04          market app stores, having plotted
         05          the amount of usage data for them
         06          versus the usage of the real app
         07          store.  It's not a pretty picture."
         08          Do you see that?
         09     A    I do see that.
```

62. PAGE 157:04 TO 158:08 (RUNNING 00:00:45.930)

```
         04     Q    And the -- the penultimate paragraph, not the
         05    little tiny short paragraph but the one before that,
         06    it says, "I took" --
         07     A    "I took four days," uh-huh.
         08     Q    Yes, that's right.
         09     A    Yep.
         10     Q    (As read):
         11          "I took four days of data and
         12          measured the difference between the
         13          real AppStore and 'some' of the
         14          confirmed pirate app stores."
         15     A    Uh-huh.
         16     Q    And then there's a list in parenthesis.
         17          Are those some of the -- what I was calling
         18    black market app stores?
         19     A    That's right.
         20     Q    Okay.  (As read):
         21          "At this point, in China," you
         22          write, "it appears that the Black
         23          Market is the market."
         24     A    Uh-huh.
         25     Q    (As read):
00158:01          "The legit business is a rounding
         02          error."
         03          Do you see that?
         04     A    Uh-huh.
         05     Q    Rounding error, of course, means that it was
         06    a very small amount, right?
         07     A    Yeah.  Probably hyperbole in this context,
         08    but I don't have the data in front of me, so...
```

111

Friedman, Eric (Vol. 02) - February 2, 2021   1 CLIP (RUNNING 00:02:00.417)

---

4 SEGMENTS (RUNNING 00:02:00.417)

---

1. PAGE 346:19 TO 346:24 (RUNNING 00:00:14.142)

```
        19        Q    Okay.   Exhibit 276 is a chat between you and
        20     Herve Sibert, correct?
        21        A    Yes.
        22        Q    And it was a chat on February 14th, 2020,
        23     correct?
        24        A    Yes.
```

2. PAGE 347:06 TO 347:11 (RUNNING 00:00:11.686)

```
        06        Q    You state (as read):
        07             "Which is why we," meaning Apple,
        08             "are the greatest platform for
        09             distributing child porn, et cetera,"
        10             correct?
        11        A    I see that statement.
```

3. PAGE 347:15 TO 348:07 (RUNNING 00:00:43.043)

```
        15        Q    Okay.  Herve responds at 15:25 (as read):
        16             "Really?  I mean, there's a lot of
        17             this in our ecosystem?  I thought
        18             there were even more opportunities
        19             for bad actors on other filing" --
        20             "file sharing systems," right?
        21        A    Yes.
        22        Q    And you respond (as read):
        23             "Yes," correct?
        24        A    Yes.
        25        Q    And then you're continuing on the next page
  00348:01     within Exhibit 276, the Bates at -- 15:25 GMT (as
        02     read):
        03             "But -- and here's the key -- we
        04             have chosen not to know in enough
        05             places where we really cannot say."
        06             correct?
        07        A    Yes.
```

4. PAGE 348:15 TO 349:14 (RUNNING 00:00:51.546)

```
        15             "The NY Times published a bar graph
        16             showing how companies are doing in
        17             this area.  We are on it, but I
        18             think it's an underreport," correct?
        19        A    Yes.
        20        Q    You wrote at 15:27 (as read):
        21             "Also, we KNOW that developers on
        22             our platform are running social
        23             media integrations that are
        24             inherently unsafe.  We can do things
        25             in our ecosystem to help that.  For
  00349:01             example 'ask to chat' is a feature
        02             we could require developers to adopt
        03             and use for U13 accounts."
        04             Do you see that?
        05        A    Yes.
        06        Q    Herve responded (as read):
        07             "There are also lots of rapidly
```

```
08          changing trends in public focus,"
09          correct?
10     A    Yes.
11     Q    And you responded (as read):
12          "Let the parents make a decision,"
13          correct?
14     A    Yes.
```

<u>*Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640-YGR-TSH (N.D. Cal.)</u>

Deposition Designation of Ron Okamoto (Vol. 1 & 2)
(December 16, 2020)
(December 17, 2020)

Time

Epic Games, Inc.'s Designations (Blue Highlight)	Apple Inc.'s Designations (Yellow Highlight)
11 minutes 19 seconds	N/A

Okamoto, Ron (Vol. 01) – December 16, 2020   1 CLIP (RUNNING 00:00:28.367)

4 SEGMENTS (RUNNING 00:00:28.367)

1. PAGE 16:05 TO 16:07 (RUNNING 00:00:06.374)

```
05            Would you please state just for the record
06   your name and address?
07      A.   Ron Okamoto.
```

2. PAGE 44:12 TO 44:15 (RUNNING 00:00:13.648)

```
12      Q.   Okay.  So from 2001 to date, your title
13   would be vice-president developer relations, correct?
14      A.   I believe the formal title is vice president
15   worldwide developer relations.
```

3. PAGE 64:03 TO 64:05 (RUNNING 00:00:06.812)

```
03      Q.   And is it correct that the app reviewers
04   typically review in each review, 15 to 100 apps per
05   day?
```

4. PAGE 64:07 TO 64:07 (RUNNING 00:00:01.533)

```
07            THE WITNESS:  In general, yes.
```

Okamoto, Ron (Vol. 02) - December 17, 2020　　　　　　　　　　1 CLIP (RUNNING 00:10:57.740)

---

34 SEGMENTS (RUNNING 00:10:57.740)

---

1. PAGE 273:15 TO 273:18 (RUNNING 00:00:11.834)

```
15      Q.   Okay.  And Apple doesn't think its unsafe to
16  use a Mac, does it?
17      A.   No.  We don't think it's unsafe to use a
18  Mac.
```

2. PAGE 274:02 TO 274:04 (RUNNING 00:00:08.139)

```
02      Q.   Okay.  So it's fair to say that using a Mac
03  is not insecure, right?
04      A.   Yes, I believe so.
```

3. PAGE 277:19 TO 277:22 (RUNNING 00:00:13.416)

```
19           Have you ever heard of a developer
20  withdrawing their app from the App Store because they
21  can create a web app?
22      A.   No, I can't name anything in specific.
```

4. PAGE 279:07 TO 279:09 (RUNNING 00:00:13.918)

```
07      Q.   Have you ever heard anybody at Apple say
08  that the macOS is a less secure platform than iOS?
09      A.   No, I haven't.
```

5. PAGE 289:19 TO 289:21 (RUNNING 00:00:07.908)

```
19      Q.   So I'd like actually to mark an exhibit
20  which I believe will be 41.  I'll tell you when I've
21  done so.
```

6. PAGE 291:12 TO 291:14 (RUNNING 00:00:07.149)

```
12      Q.   Okay.  Do you have any reason to doubt that
13  you received this e-mail?
14      A.   No, I do not.
```

7. PAGE 291:15 TO 291:19 (RUNNING 00:00:11.498)

```
15      Q.   Okay.  You see the first paragraph of this
16  e-mail says (as read):
17           Attached is a study we conducted
18           on App Store developers?
19      A.   Yes.
```

8. PAGE 295:01 TO 295:06 (RUNNING 00:00:13.352)

```
00295:01          Developers were randomly selected
      02           from the App Store Analytics team's
      03           database and invited to participate
      04           in a 15-minute web survey.
      05           Do you see that?
      06      A.   Yes.
```

9. PAGE 305:21 TO 305:22 (RUNNING 00:00:07.759)

```
21      Q.   If you would please navigate with me to page
22  Bates ending in -- sorry, Bates ending in 55.
```

10. PAGE 306:12 TO 306:23 (RUNNING 00:00:24.163)

```
12      Q.   And do you see the bottom left there's a
13  small gray text that says (as read):
14           Base:  Develops apps for
15           non-Apple OS and platforms?
16           Do you see that?
17      A.   Yes.
18      Q.   And the question is (as read):
19           What other operating systems and
20           platforms does your company develop
21           apps for?
22           Do you see that?
23      A.   Yes, I do.
```

11. PAGE 307:21 TO 308:02 (RUNNING 00:00:28.903)

```
21           And in the U.S. column it says:  86 percent.
22  Is it consistent with your understanding that a lot
23  of iOS developers also program apps for Android?
24      A.   I would say it's consistent with my
25  understanding that many do.
00308:01      Q.   Okay.  And why do many developers program
02  for both iOS and Android?
```

12. PAGE 308:04 TO 308:21 (RUNNING 00:00:54.997)

```
04           THE WITNESS:  Because by being on both iOS
05  and Android a developer can get to the broadest
06  customer set possible.
07  BY MR. BYARS:
08      Q.   And when you say "customer set," are you
09  referring to the users of devices running those
10  operating systems?
11      A.   Yes.
12      Q.   If you would look at the row near the
13  bottom, it says:  Game consoles.
14           Do you see that?
15      A.   Yes.
16      Q.   And it says:  3 percent.  Do you see that
17  under the U.S. column?
18      A.   Yes.
19      Q.   Is it consistent with your understanding to
20  say that most Apple developers do not program for
21  game consoles?
```

13. PAGE 308:23 TO 308:24 (RUNNING 00:00:04.744)

```
23           THE WITNESS:  In my dealings with developers
24  I've run across very few that do.
```

14. PAGE 309:15 TO 310:03 (RUNNING 00:00:43.148)

```
15      Q.   So, Mr. Okamoto, I'd like you to navigate to
16  Exhibit 42, which I've marked.  It's a document, the
17  Bates stamp on the first page is -- ends in 320915.
18           Let me know when you have that exhibit
19  pulled up.
20      A.   Yes, I have it.
21      Q.   AND there's an e-mail starting in the middle
22  of the page, says (as read):
23           Eshwar Vangala wrote.
24           Do you see that?
25      A.   Yes.
00310:01      Q.   Mr. Vangala is one of the direct reports
02  that we were talking about earlier, right?
03      A.   That's correct.
```

15. PAGE 311:23 TO 312:09 (RUNNING 00:00:32.112)

```
      23      Q.   And he says (as read):
      24               Many developers claim to "test
      25           market" on Android as they feel they
00312:01           can build a buzz for their app on
      02           Android and then monetize on iOS.
      03           Do you see that?
      04      A.   Yes, I do.
      05      Q.   Have you heard developers indicate that they
      06   would publish on Android first before publishing on
      07   iOS?
      08      A.   There's been occasions where developers have
      09   mentioned that to me.
```

16. PAGE 312:16 TO 312:18 (RUNNING 00:00:05.355)

```
      16      Q.   Why would they choose to prototype on
      17   Android rather than another operating system such as
      18   iOS?
```

17. PAGE 312:20 TO 312:25 (RUNNING 00:00:19.888)

```
      20           THE WITNESS:  It depended on the developer.
      21   I think in some cases, you know, they had said that
      22   it was easier and quicker for them to do it.  And
      23   other cases they wanted to try things out on the
      24   Android platform with respect to the technology and
      25   then see if that works and then put it into iOS.
```

18. PAGE 320:04 TO 320:10 (RUNNING 00:00:22.552)

```
      04           Let's look at the next to last bullet.  The
      05   penultimate bullet, it says (as read):
      06               iOS consistently is the
      07           monetization platform of choice.
      08           Have you heard from developers that iOS is
      09   the monetization platform of choice?
      10      A.   Yes, I have.
```

19. PAGE 320:14 TO 320:22 (RUNNING 00:00:28.508)

```
      14      Q.   Did they explain why they viewed iOS that
      15   way?
      16      A.   Yes, they did.
      17      Q.   What did they explain?
      18      A.   They explained when they took a look at a
      19   title, the similar title that was on Android and that
      20   was on iOS in general, users spent more money on the
      21   iOS application than they did on the Android
      22   application.
```

20. PAGE 324:04 TO 324:13 (RUNNING 00:00:45.186)

```
      04      Q.   Has Apple ever wanted Epic to create
      05   products for the iOS platform?
      06      A.   Yes.
      07      Q.   Why did Apple want Epic Games to do that?
      08      A.   Because when the iOS platform first came
      09   out, one of the things that we highlighted was what a
      10   great gaming device the iPhone with iOS was.  Epic is
      11   a very well-known developer that had some very strong
      12   titles on it and we thought it would be great if they
      13   would offer them on the iOS platform.
```

21. PAGE 324:20 TO 325:01 (RUNNING 00:00:23.884)

```
      20      Q.   And is that because doing so would attract
      21   users to the iOS platform?
      22      A.   Yes.  If the popular games they're playing
      23   from developers and titles that they love were on
```

```
24  iOS, we think it would be attractive for our users.
25     Q.    And if you made it attractive for users, you
00325:01  would sell more iOS devices, right?
```

22. PAGE 325:03 TO 325:06 (RUNNING 00:00:08.807)

```
03          THE WITNESS:  If we made it attractive to
04  users, we would definitely make the platform more
05  attractive to everybody, and therefore, hope that
06  they would come to it.
```

23. PAGE 325:08 TO 325:10 (RUNNING 00:00:06.326)

```
08     Q.    By "come to it," you mean buy devices, buy
09  iOS devices?
10     A.    Yes.
```

24. PAGE 349:02 TO 349:03 (RUNNING 00:00:03.712)

```
02     Q.    Okay.  So I'm looking at Exhibit 46.  Can
03  you pull that up for me.
```

25. PAGE 349:08 TO 349:10 (RUNNING 00:00:13.088)

```
08     Q.    Is this an e-mail chain between you and
09  Phillip Schiller and Eddie Cue?
10     A.    Yes.
```

26. PAGE 349:14 TO 349:23 (RUNNING 00:00:26.956)

```
14     Q.    It begins (as read):
15              Phil and Eddy,
16              I spoke to Eric Wilfred today
17          about this week's internal meeting
18          for the next office launch.
19          Do you see that?
20     A.    Yes.
21     Q.    Who is Eric Wilfred?
22     A.    At the time Eric Wilfred was one of our
23  contacts at Microsoft.
```

27. PAGE 350:16 TO 351:04 (RUNNING 00:00:48.839)

```
16     Q.    All right.  If you would look at the third
17  bullet or the third dash, there's a paragraph that
18  says (as read):
19              They want us to think about an
20          idea they have to handle signing up
21          for subscriptions for Office from
22          within their iOS app.
23          Do you see that?
24     A.    I'm sorry, you said the third bullet or the
25  third --
00351:01   Q.    It's the third large paragraph, the third
02  bullet, the third hyphen, they want us to think
03  about.
04     A.    Okay, I see it.
```

28. PAGE 351:12 TO 351:20 (RUNNING 00:00:15.449)

```
12     Q.    Okay.  The paragraph says (as read):
13              Instead of using IAP --
14          I'm reading the second sentence now
15  (as read):
16              Instead of using IAP, they would
17          like to send users out to their
18          "sign-up for Office website."
19          Do you see that?
20     A.    Yes.
```

119

29. PAGE 352:02 TO 352:08 (RUNNING 00:00:12.195)

```
02    Q.    It continues (as read):
03               They would then give us
04          percentage of the revenue for each
05          user that signs up for an account
06          that comes from our devices.
07          Do you see that?
08    A.    Yes, I do.
```

30. PAGE 352:18 TO 352:24 (RUNNING 00:00:16.334)

```
18    Q.    (As read):
19               The rationale is that they want
20          to be able to have a consistent
21          experience for signing up users.
22          I'm in the next paragraph.
23          Do you see that?
24    A.    Yes, I do.
```

31. PAGE 353:07 TO 353:15 (RUNNING 00:00:31.153)

```
07    Q.    Okay.  Have you ever heard any developer say
08 they wanted to have a consistent experience for
09 signing up users?
10    A.    Yes, I have.
11    Q.    Why -- had the developers explained why they
12 want that?
13    A.    The developers that I have spoken to said
14 that they have existing what they call sign up flows,
15 and they wanted to maintain those sign up flows.
```

32. PAGE 358:18 TO 358:19 (RUNNING 00:00:04.503)

```
18    A.    Mr. Byars, are we opening Exhibit 47?
19    Q.    Yes, that's right.
```

33. PAGE 358:24 TO 359:01 (RUNNING 00:00:09.381)

```
24               The first e-mail at the top of the document
25 is from you; is that right?
00359:01    A.    Yes, it is.
```

34. PAGE 359:21 TO 360:09 (RUNNING 00:00:32.584)

```
21    Q.    In that third paragraph Mr. Schiller says
22 (as read):
23               If PayPal were to announce a
24          mechanism for iPhone developers that
25          helps them to enable features or
00360:01          functionality of iPhone applications
02          with payments handled by PayPal, we
03          would need to communicate with our
04          developers, telling them that such
05          use would be a violation of the
06          iPhone developer agreement terms.  I
07          hope that does not become the case.
08          You see that?
09    A.    Yes, I do.
```

Epic Games, Inc. v. Apple Inc., No. 4:20-cv-05640-YGR-TSH (N.D. Cal.)
Transcription Errors

DATE OF DEPOSITION: February 24, 2021
NAME OF DEPONENT: Ong, Adrian

Page	Line(s)	Original	Correction	Comment
74	9	"internet"	"in-app"	Transcription Error

DATE OF DEPOSITION: January 12, 2021
NAME OF DEPONENT: Shoemaker, Phillip (Vol. 1)

Page	Line(s)	Original	Correction	Comment
73	24	"impromptu"	"imprimatur"	Transcription Error
74	3	"impromptu"	"imprimatur"	Transcription Error
134	17	"2006"	"2016"	Transcription Error

DATE OF DEPOSITION: January 14, 2021
NAME OF DEPONENT: Shoemaker, Phillip (Vol. 2)

Page	Line(s)	Original	Correction	Comment
488	6	"siloing"	"sideloading"	Transcription Error
488	10	"siloing"	"sideloading"	Transcription Error

DATE OF DEPOSITION: March 8, 2021
NAME OF DEPONENT: Forstall, Scott (Vol. 1)

Page	Line(s)	Original	Correction	Comment
41	7	"nominal"	"phenomenal"	Transcription Error

DATE OF DEPOSITION: January 13, 2021
NAME OF DEPONENT: Haun, CK (Vol. 1)

Page	Line(s)	Original	Correction	Comment
185	1	"Max"	"Mac"	Transcription Error

DATE OF DEPOSITION: February 1, 2021
NAME OF DEPONENT: Friedman, Eric (Vol. 1)

Page	Line(s)	Original	Correction	Comment
50	11	"Infra-system"	"Eco-system"	Transcription Error

DATE OF DEPOSITION: December 16, 2020
NAME OF DEPONENT: Okamoto, Ron (Vol. 1)

Page	Line(s)	Original	Correction	Comment
64	4	"15"	"50"	Transcription Error